

10 DEF PACKAGING



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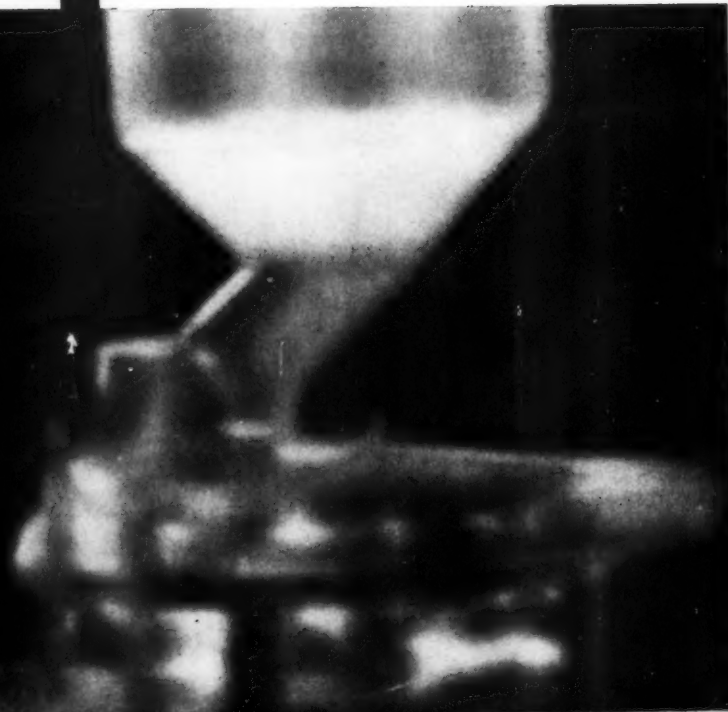




Illustration Courtesy of the R. J. REYNOLDS TOBACCO CO.

9 adhesives protect a cigarette's fine taste

Few people know how freshness—*factory freshness* is preserved in making, packaging and shipping their favorite cigarette.

Adhesives (1) seal cigarette paper, (2) attach cork and filter tips, (3) laminate foil and paper linings, (4) seal paper packs, (5) attach revenue stamps, (6) seal cellophane wraps, (7) form and seal cartons, (8) close shipping cases, (9) attach shipping labels.

These 9 adhesives, which are made from resin, starch, dextrine and casein bases, must fulfill many requirements. They're colorless, tasteless, nontoxic, moisture resistant, nonstaining, heat sealing, high speed, and capable of bonding a wide range of surfaces.

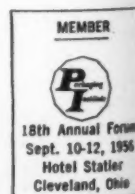
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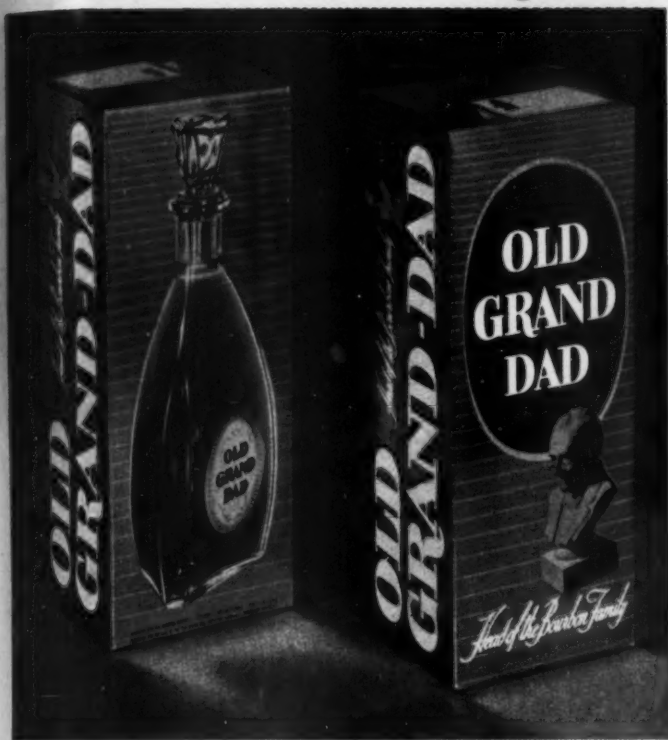
ADHESIVES

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See us
at booth 200

Showcase Specials by Gair



OLD BOURBON-NEW LOOK. Gair-Reynolds Foilene, gravure printed by Gair, adds a new luster to this gift carton for Old Grand-Dad bourbon whiskey. The carton, by the way, won a First Prize in this year's Folding Paper Box Association of America Competition.

The distinguished graphic design was created by Gair for National Distillers Products Corp. It's printed in five colors on silver Foilene. The carton's easy tuck top and sturdy Quickset bottom construction makes for quick, safe handling.

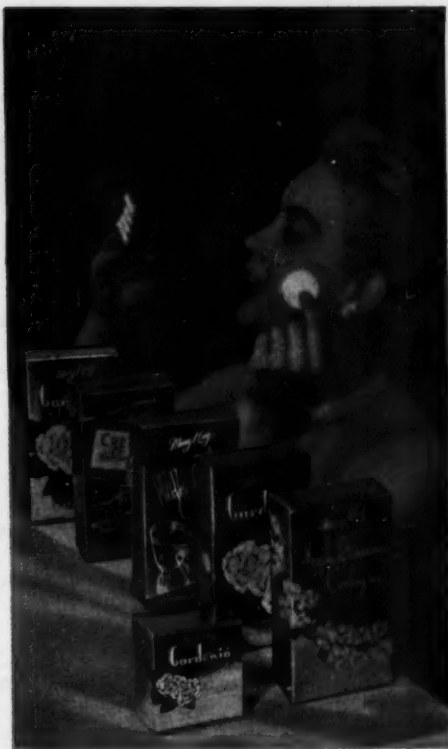
Maybe you've got a product that needs something special in the way of a carton. Costs nothing to talk to the man from Gair about it.



A STICKY BUSINESS NO LONGER. Curtiss' chocolate covered jelly strings get special treatment in their new Gair carton.

Inside story here is Gair's chocolate glassine board. The glassine is laminated to a white Gaircote news back board that brightens the eye appeal of Curtiss Candy Company's graphic design. Carton is reverse tuck style with acetate window.

If yours is a hard-to-handle product, why not find out what Gair cartons made from our special boxboard can do. No obligation, of course.



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Gair Package Analysis is a service designed to blueprint a package that will fit your product, your packing and shipping methods and your market. Write us at 155 East 44th St., N. Y. 17, N. Y.



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FC&I

MODERN PACKAGING

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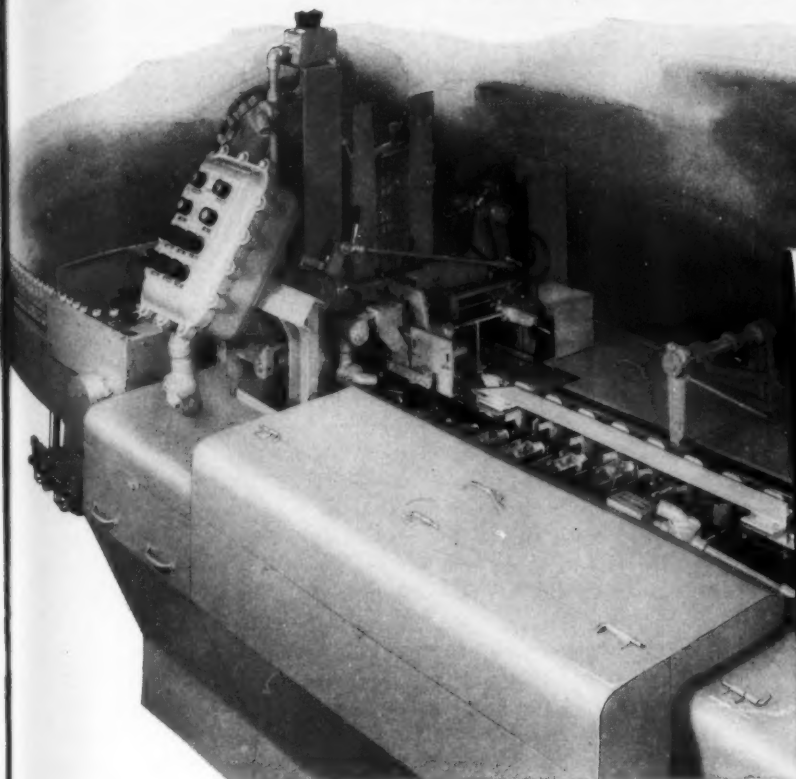
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The Knomark Manufacturing Company, Inc., Brooklyn, producer of famous Esquire shoe dressings, has achieved outstanding efficiency in manufacturing and packaging techniques. The addition of this machine raises the total to 6 Jones Cartoners handling Esquire polishes — 4 CMCs and 2 CMVs.

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See
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BOOTH #425

**THE PACKAGING MACHINERY
AND MATERIALS EXPOSITION
OF 1956**

SEPTEMBER 11-14
Cleveland Public Auditorium

R. A. JONES & COMPANY, INC.

P. O. BOX 485

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MODERN PACKAGING

The broader viewpoint

The first Packaging Machinery & Materials Exposition, to be held in Cleveland, Sept. 11-14, will have served a useful purpose if it accomplishes no more than to focus attention upon the vital interrelation today of machines to machines, and of materials to machines.

The packaging man today thinks of production not in terms of machines, but in terms of lines. The component machines that make up a typical packaging line must be planned, one for the other, and must work together with speed, precision and balance if the continuous high-speed production demanded by today's economy is to be achieved. Moreover, the important role of the material supplier in keeping the line running at maximum efficiency is increasingly recognized.

So it is good that at Cleveland next month the packager will, for the first time, be able to concentrate all of his attention on machines and the materials on which they feed, and can very likely find, under one roof, all of the answers to his production problems.

It is good, too, that the packaging-machinery industry has been able to get together in a cooperative endeavor such as this and, by bringing in the materials manufacturers too, give emphasis to a spirit of cooperation between the two supplying industries.

There has not always been this attitude of mutual responsibility. The individual machine manufacturer has been prone to go his own way, to build to his own standards and to let the customer worry about whether or not those standards agree with those of the next machine in the line. The results of important research and development work have too often been selfishly held, not shared, even though it should be obvious that high speed in a labeler, for example, is useless if it exceeds the speed of the capper that precedes it in the line.

That kind of short-sighted individualism fortunately is rare, if not extinct, today. The opening of the show in Cleveland is dramatic evidence of a new spirit and a new outlook on the mechanical problems of packaging as a whole. To the packager, the show will offer a unique opportunity for the same kind of balanced thinking and planning.

The Editors



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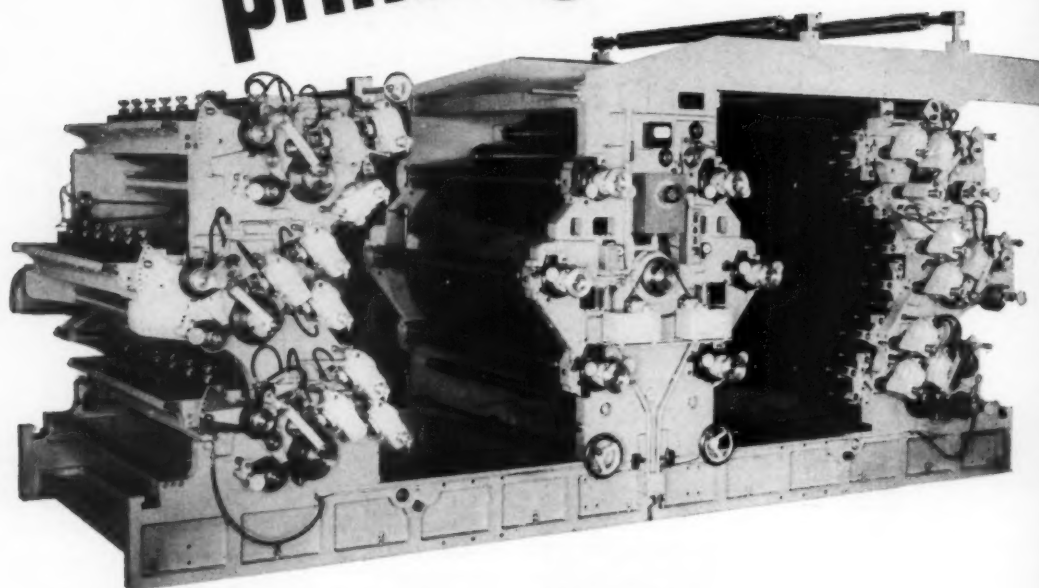
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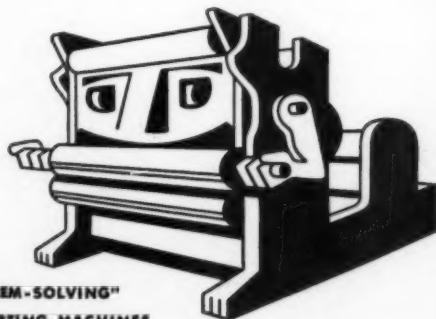
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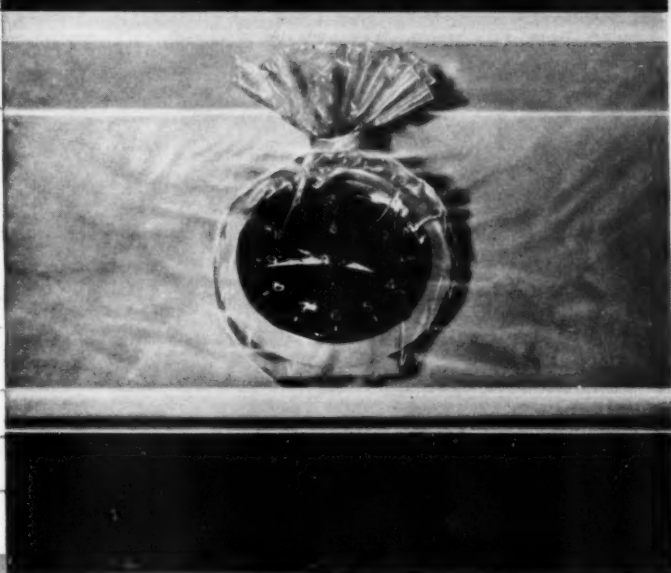
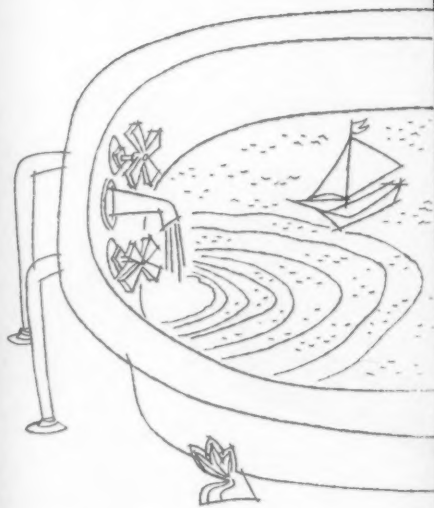
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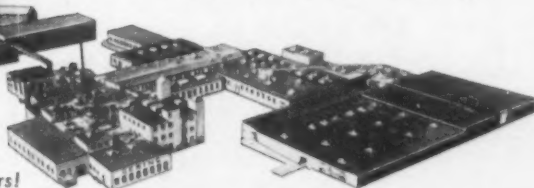


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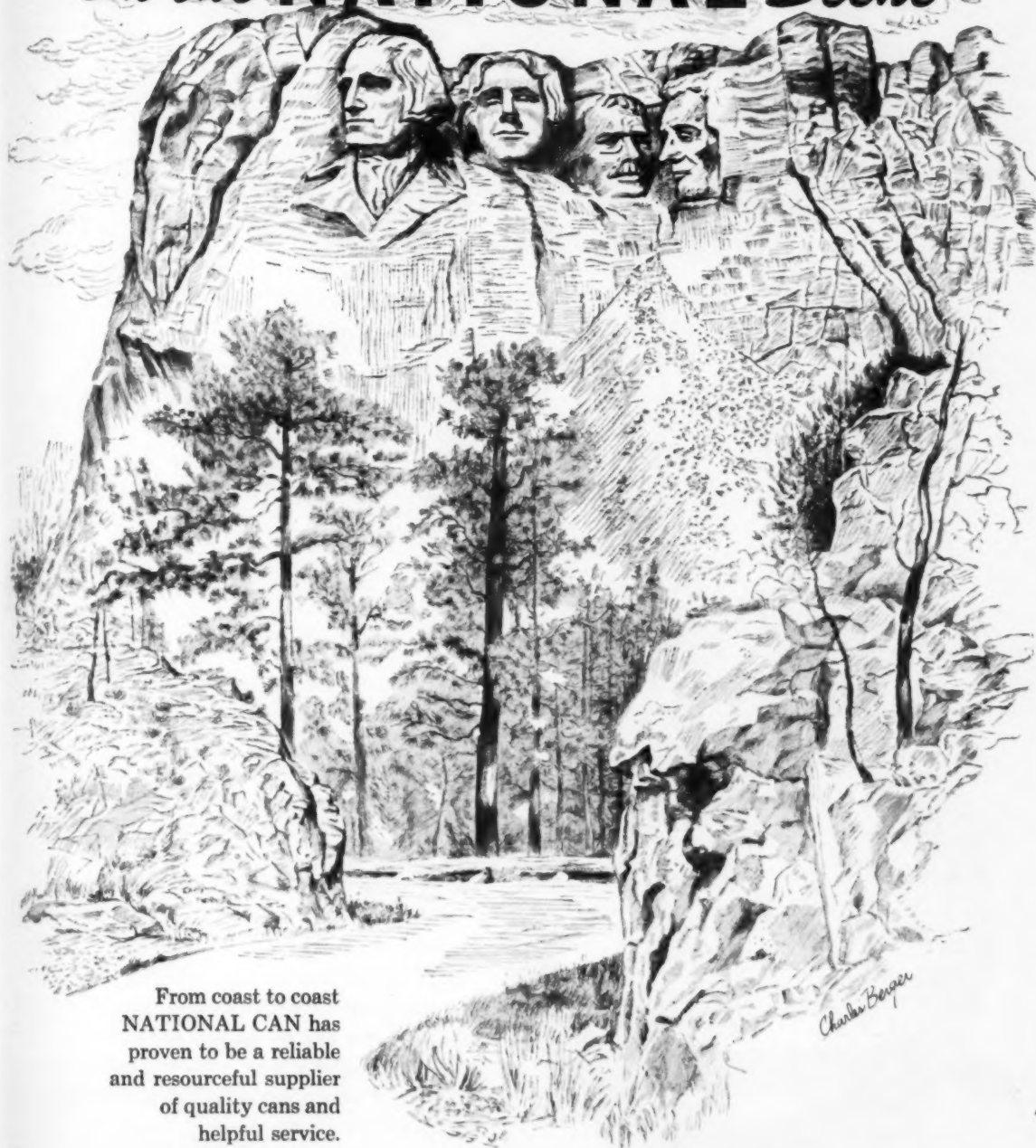
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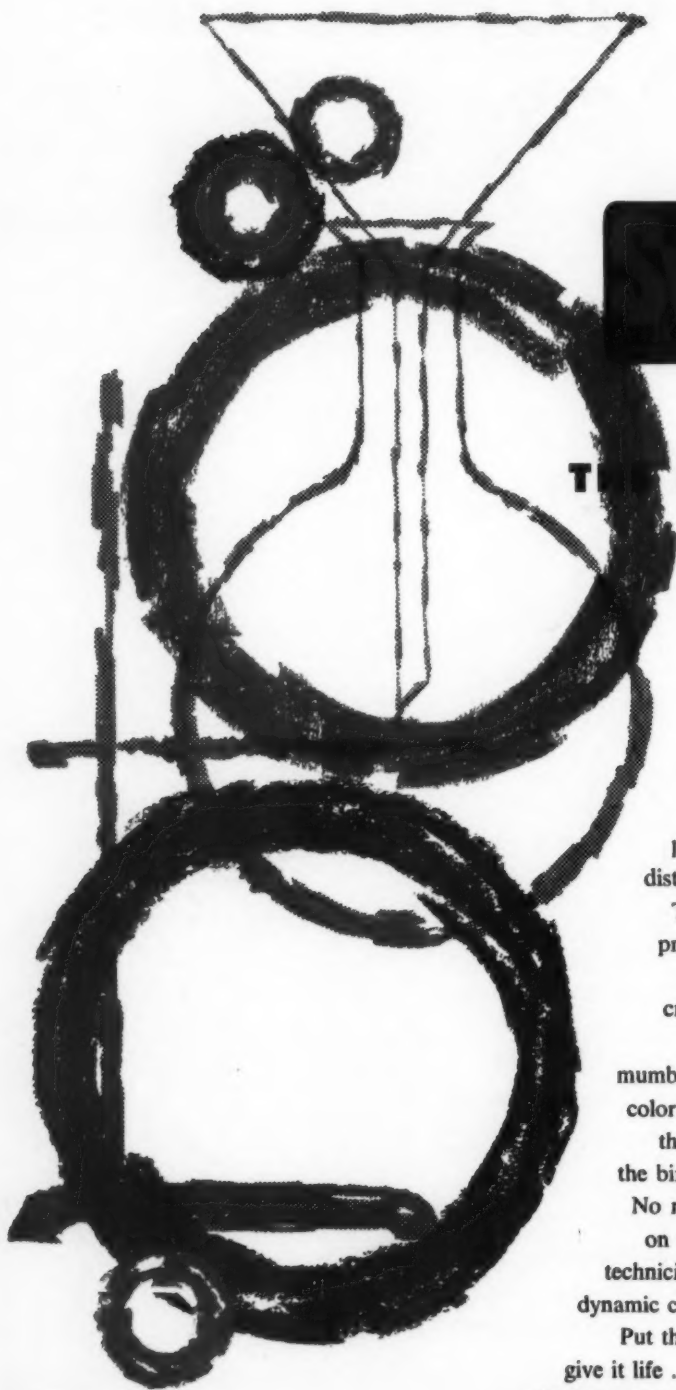


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Calgon's "aluminum" package is handsome, too, as all can see. Find out what this packaging can do for your product's protection and appearance. Call any Reynolds Sales Office (all principal cities). Or write to **Reynolds Metals Company,** General Sales Office, Louisville 1, Kentucky.

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See "FRONTIER", Reynolds great dramatic series, Sundays, NBC-TV Network.

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Read what Mr. William C. McKenna, Vice-President
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Dear Mr. Kuhn:

We thought you might be interested in knowing that back in 1925 when a decision was reached to change from corks to metal seals we shopped the market in an effort to obtain the best possible capping machine. Since our product is hygroscopic and very difficult to protect, the proper application of the seal is of utmost importance; therefore, Capem was our selection. We have operated the Capem machines on each of our five lines constantly over a period of 28 years. Throughout this entire time we have enjoyed a combination of the highest efficiency with a minimum of operating and maintenance cost. For genuine packaging economy I heartily recommend Capem Cappers.

Yours very sincerely,
THE EMERSON DRUG COMPANY

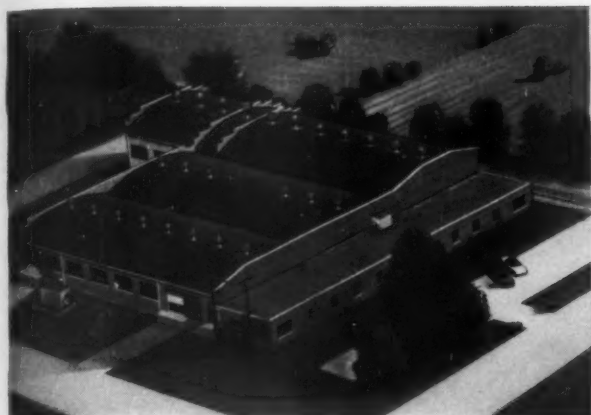
Wm. C. McKenna
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CONSOLIDATED PACKAGING MACHINERY CORP.

Buffalo 13, New York

FIRST FULLY AUTOMATIC PLASTICS PLANT OPENS



PLASTIC BOX PRICES DROP WITH NEW GIBBS MOLDING OPERATION

HENDERSON, KY.—Gibbs Automatic Moulding Corporation, the first 100% automatic assembly line operation in the injection molding industry has been opened here. Situated on eight and a half acres, with its thirty thousand square feet of production space all on one floor, the Gibbs plant is a revolutionary advance in both design and equipment. According to Robert K. Gibbs, president, the introduction of complete automation will substantially reduce prices of rigid plastic boxes.

#1 Packaging Medium Now Open to Every Market



Lower prices now make it practicable for more products to enjoy the advantages of the promotional and protective rigid plastic package. Complete automation will bring unit prices down to a point where it is in competition with every type of cheaper material. "With this new and efficient operation", Gibbs stated, "manned by experts in the field of rigid plastic packaging, I see no reason why we can't produce rigid plastic boxes at a lower cost than any other producer in the U. S. And, I am ready to substantiate this statement with bids."

BETTER BOXES, FASTER PRODUCTION, LOWER COST

President Gibbs informed the press that aside from automation, every feature of the plant is geared to achieve a better product, faster production at lower cost. The all-on-one-floor, fireproof plant employs every modern utility, every labor saving device. 1000 kilowatt electric power supply will keep the 100% automatic assembly line functioning at top speed and efficiency.

POPULAR SIZE STOCK MOLDS READY. GET GIBBS BID AND QUICK SERVICE

Production, according to Gibbs, is in full swing. Molds have been made for popular, production run 12 and 16 oz. sizes. The new firm is ready to mold large quantities to any specification. Users are invited to get the Gibbs quote on their plastic box requirements.

For Quick Service, Quality Rigid Plastic Boxes, Low Quotes, call Robert K. Gibbs at Henderson 9573 or write: Gibbs Automatic Moulding Corporation, Henderson 2, Kentucky.

"ONLY NEW PLANT CAN ANSWER INDUSTRY'S NEED", SAYS PIONEER GIBBS

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the producer of more such boxes than any other individual in the country. Gibbs' conviction that only 100% automatic presses could beat the high cost of manually operated presses and meet soaring production demands led to the sale of his old company and the building of his present plant. Gibbs Automatic Moulding brings with it Gibbs' 15 years experience, knowledge, and his seasoned, expert personnel. Says Gibbs, "Now we have the wherewithal for faster production of better boxes at lower cost."

Your stockings take on the beauty of their packaging.
And this luxury of package creates
an atmosphere that touches
all who handle your brand
—from buyer to salesgirl to consumer.
Your product reaps a new respect,
that shows itself in higher sales.
The glamour of "Jewel Mist" might go to market
with your stockings. Write, wire
or telephone . . . Old Dominioneers will wrap your
brand with beauty that whispers — buy me!

Beauty and the Box

PLANTS LOCATED THROUGHOUT THE SOUTH

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fifty year OLD DOMINION Box Company Inc

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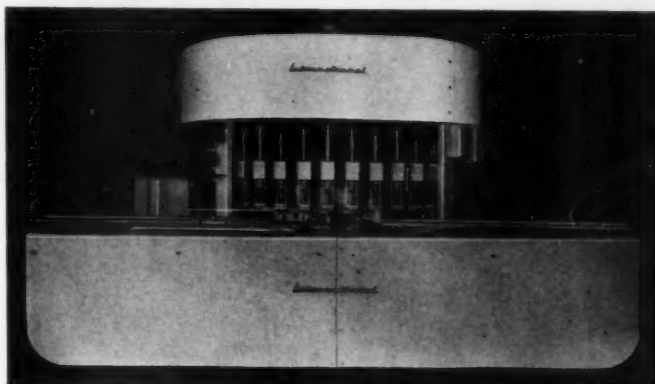
INT

two international favorites

Highlighting the advance design and appearance of International's complete line of filling and case packing machinery, here are two leaders in their respective fields.

ROTARY FILLING MACHINE

- ★ Fluid drive
- ★ Automatic one-shot lubricating system
- ★ Stainless steel standard contact parts
- ★ Cam action heads
- ★ Patented foam control valve
- ★ Vacuum or gravity for combination system
- ★ Magnetic starwheels
- ★ Speeds up to 500 containers per minute



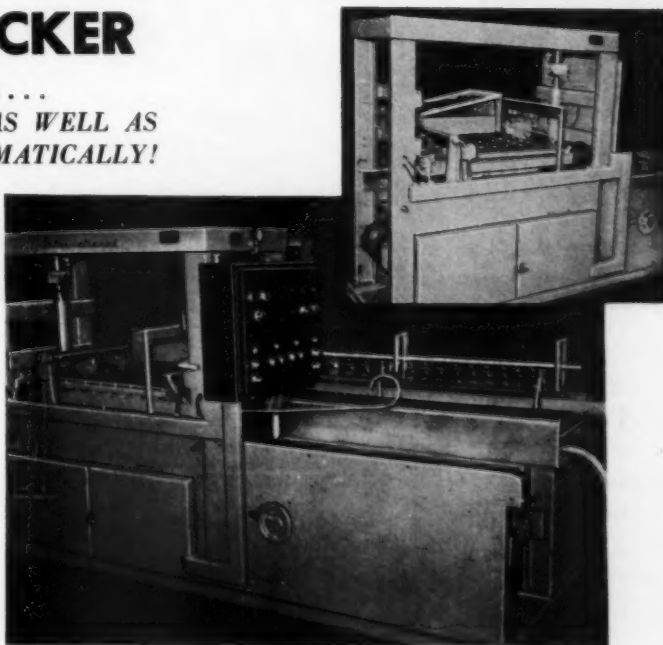
New! CASE PACKER

The Case Packing Triumph . . .

OUT-OF-ROUND CONTAINERS, AS WELL AS ROUND, CAN BE CASED AUTOMATICALLY!

- ★ Does not mar labels, cellulose seals, or revenue stamps
- ★ Occupies less than 40 square feet of floor space
- ★ Capable of multiple case packing
- ★ No case—no drop
- ★ Electrically counts containers
- ★ Automatic case feed
- ★ Quick changeover for different containers
- ★ Automatic speed control up to 500 containers per minute

International solves packaging problems . . . making packaging lines more profitable and packagers' headaches fewer. A full complement of sturdy, straight line, fully automatic filling machinery completes the set of "International Favorites."



Both machines on display
BOOTH 356
PMMI EXPOSITION
Cleveland, Sept. 11-14

INTERNATIONAL FILLING MACHINE CORPORATION
PETERSBURG, VIRGINIA, U. S. A.



**Wolverine's
know how...**



You can rely on the Wolverine Hydro-Printer — either standard, or our Model X-120 complete with enclosed overhead, for fast, colorful and economical printing.

This hydraulic press is fully automatic with motorized free wheeling ink rollers. It has automatic super-tension control on unwind and rewind, is self-energizing and positive, eliminating time consum-

One of three standard Wolverine Hydro-Printers at Excel Paper Ltd., Montreal, Canada. These presses are 41" wide in three and four colors, running at speeds of 500 to 600 feet per minute on quality bread wraps

ing adjustments. Prints with accurate register on all paper, foil, cellophane, polyethylene, acetate, plastic film, etc.

Printing widths 31" to 91" up to six colors. Standard repeats 10" to 40" — available from 10" to 60" repeats.



for BREAD WRAPS it's

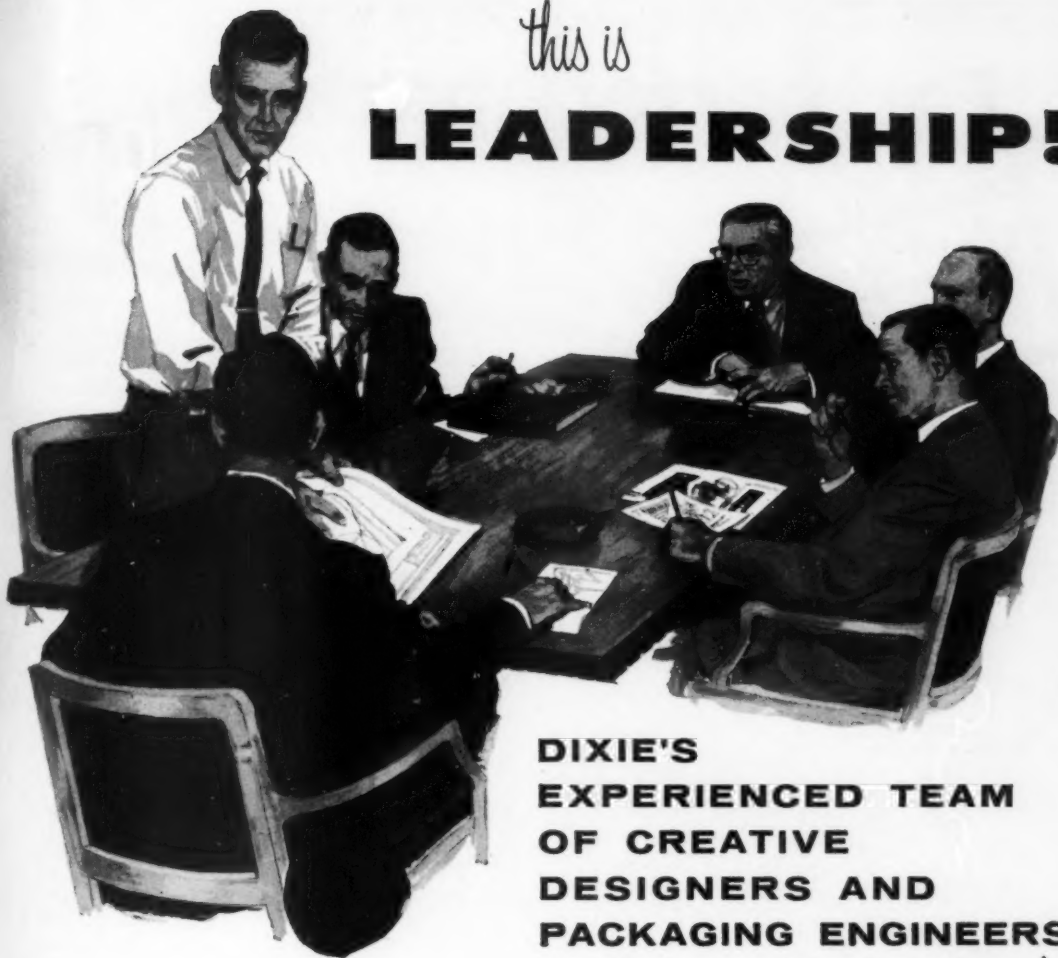
Write or
Wire Dept. "D"

WOLVERINE PAPER CONVERTING
MACHINERY CORP.

18584 FITZPATRICK AVENUE

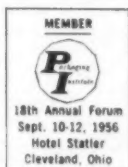
DETROIT 28, MICHIGAN

this is
LEADERSHIP!



**DIXIE'S
EXPERIENCED TEAM
OF CREATIVE
DESIGNERS AND
PACKAGING ENGINEERS**

can be yours for the asking!



All it takes
is a call
or a letter
Why not
take
advantage
of our
Creative
Services
today?



We are pardonably proud of our team of Creative Designers and Packaging Engineers who work together hand in glove to solve your flexible packaging problems.

Since 1922, through the coordinated work of our Creative Team Dixie has created many forward-thinking innovations in the flexible packaging field . . . both from the standpoint of increased protection to the product, and more sales appeal to the package design.

Whatever your flexible packaging problem, whether it concerns bread, potato chips, produce, cookies, apparel, hardware . . . whatever it is . . . we are confident that our Team can produce the package and design best suited for your needs.

DIXIE

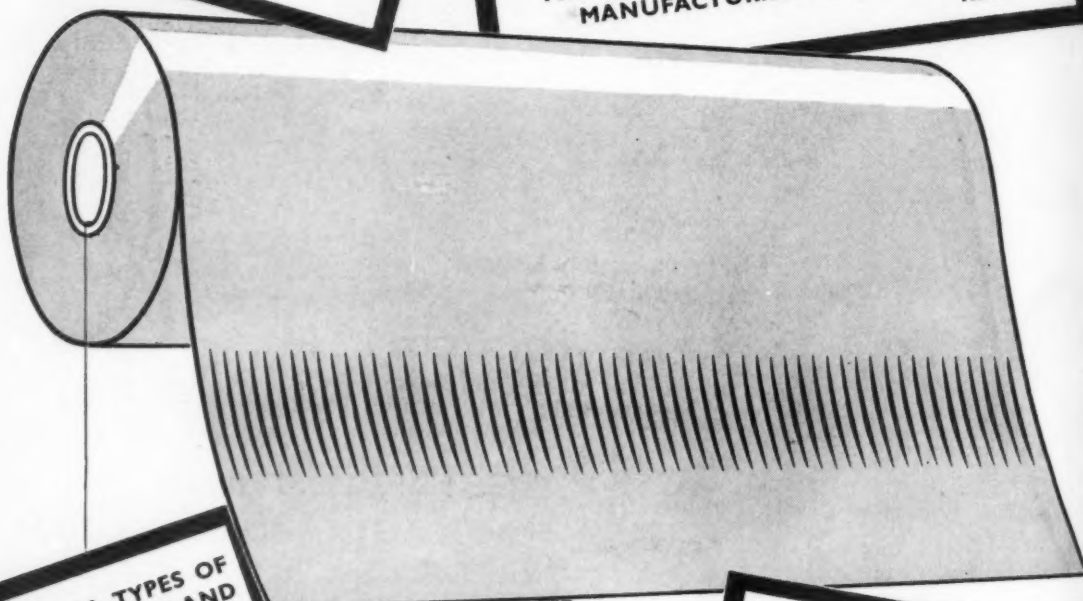
Wax Paper Company

DALLAS, TEX. . . . MEMPHIS, TENN. . . . WASHINGTON, N. J. . . . BURLINGAME, CALIF. . . . MEXICO, D. F.

For perfect packaging

* SPECIALISTS IN
ROTOGRAVURE AND
FLEXOGRAPHIC
PRINTED FOILS

* ALUMINIUM FOILS FOR THE
PACKAGING INDUSTRY SUPPLIED IN
MANUFACTURING AND CONVERTER
REELS



* ALL TYPES OF
LAMINATED AND
EMBOSSED FOILS

* MILK
BOTTLE
CAPPING
STRIP

* CONSISTENT QUALITY
& GAUGE—ALL THICK-
NESSES AVAILABLE



fisher's foils

ALUMINIUM

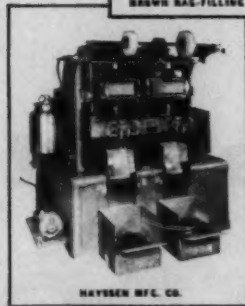
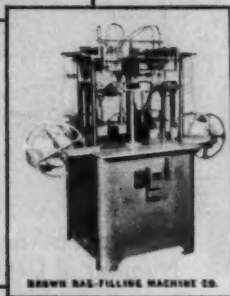
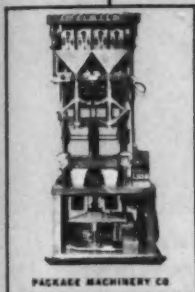
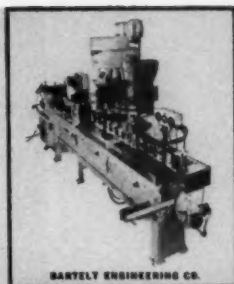
ESTABLISHED 26 YEARS * ONE OF THE MOST MODERN PLANTS IN EUROPE

FISHER'S FOILS LIMITED, EXHIBITION GROUNDS, WEMBLEY, MIDDLESEX, ENGLAND

Telephone: Wembley 6011

Cables & Grams: Liofnit, Wembley (ABC Code 6th Edn.)

M-W. 56



All seven will liquid-wrap your DAIRY CREAM!

Far from being just a gleam in some automation designer's eye, the Liquid-Wrap, single-service dairy cream pouch in ½-1 oz. sizes is here! Made possible by Cheslam's patented* controlled S-spout, a half empty pouch may be laid aside without spilling. The machines illustrated above are among those capable of producing liquid-wrap pouches now.

A tamper-proof, sanitary product that carries its own vital

selling message, produced by automation uniformly at low cost, the liquid-wrap pouch with Cheslam's patented S-spout opens unlimited possibilities, eliminates costly labor, wasteful spillage and receptacle returns.

Unlimited packaging qualities . . . transparency, gas permeability, heat sealing, labeling, etc. . . . are available in various weights of Cellothene L.P. Series.

Cellothene L.P. for Liquid Packaging in the Dairy Industry

CHESLAM CORPORATION

Division of Chester Packaging Products Corp.

684 Nepperhan Ave., Yonkers 2, N. Y., YOnkers 8-6300

Offices in Chicago—Philadelphia—Detroit—Los Angeles—Boston

☐ Please send informative bulletin.

AMPLP

☐ Please have representative call.

COMPANY _____

ADDRESS _____

CITY _____ STATE _____

NAME _____ TITLE _____

*Patent—Cheslam Corporation

AUGUST 1954

21



1 Aerosol Packaging Increases Number of Users!



2 Aerosol Products Are Used More Frequently!

Market Your Products

-Get a 4-WAY

From retail stores across America comes the answer to why so many "sleepers" suddenly are best sellers when packaged as aerosols: *they get a four-way sales boost!*

A recent survey* of leading cosmetic and fragrance manufacturers reveals that increased sales and an expansion of markets result repeatedly with the change to aerosol packaging.

Here's what they are saying:

"Our new aerosol cologne is being used in ways and by people we could never sell before," one enthusiastic manufacturer reported.

"There's less time between repeat purchases" said another. "Women use our aerosol package more often than they used the same product in liquid form," a third reported.

All this means just one thing to smart marketers—you're missing today's best bet for stimulating sales if you haven't considered aerosol packaging for your product. Last year's 240-million-unit aerosol sales are proof of that.

*Conducted by a leading drug and cosmetic trade magazine

If you have products that can be sprayed, brushed on, dusted or daubed, the revolutionary aerosol packaging technique may offer you a tremendous potential for profit. Investigate now while the field is still increasing and merchants are eager to feature anything new in aerosols.

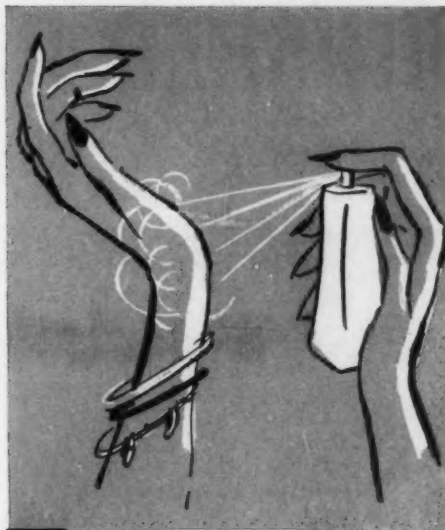
For the best aerosol products
...USE

genetron[®]
PROPELLANTS

...the right propellant for
every aerosol need.



3 Aerosol Products Are Used More Freely Each Time!



4 Aerosol Products Are Used in New Ways!

as Aerosols

SALES BOOST!

Here's Free Help!

If you want technical guidance in developing the right propellant and formulation for your product, see General Chemical. If you want information on aerosol containers, valves, packaging equipment, contract fillers, you can get it from General Chemical. As the producer of "Genetron" propellants, we have the specialized experience and the research and testing facilities to help you find the right answers to your problems.

And, you don't have to invest a cent in special equipment or personnel to enter the profitable aerosol market. There

are contract fillers near you who will take over the entire job for you quickly, economically.

Write now for list of firms equipped to fill aerosols with "Genetron" propellants.



Interested? Then send today for illustrated booklet packed with fast facts on how to market your products as aerosols: "How to Push Up Profits With Aerosols."

Write to:

"Genetron" Department
GENERAL CHEMICAL DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

Basic Chemicals for American Industry



FINISHED PLASTIC PACKAGES from a SINGLE MACHINE...



Lester AUTOMATIC Injection Molding Machines

Lester AUTOMATIC Injection Molding Machines are in fact miniature factories for producing finished plastic packages at a single station. They are self-contained units, equipped to run as individual machines, or in batteries attended by one operator.

Once the mold is installed, the proper temperatures established and the timers set for automatic repetition of the cycle—you can

almost forget them! A variety of automatic controls and safety devices are available to assure you low-cost, round-the-clock continuous production.

If you want assistance in planning your molded plastic packaging production—we'll be happy to work with you—from consultation on the mold to getting your installation running. Give us a call.



LESTER INJECTION MOLDING MACHINES

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Basle, Switzerland Hermann Wolt

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*your
product
gets*

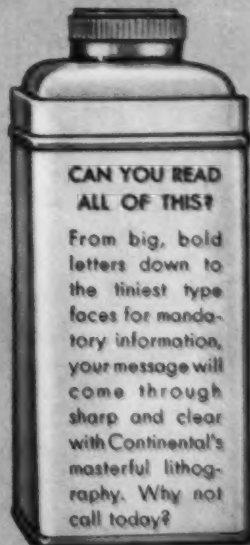
FULL-CIRCLE BEAUTY™

with Continental's unsurpassed lithography

Consider this. When you put your product in a Continental can, there is no front or back to your package. The entire outer surface is available for decoration by Continental's master lithographers. Your designers are not limited to spot treatment. If a long, explanatory message is needed, you can put it right on the can without resorting to extra wrappings, tags or booklets. Continental cans never wear out their beauty—even after months in the bedroom or boudoir. Let protective, easy-to-use Continental cans give your product "Full-Circle Beauty."

CONTINENTAL  **CAN COMPANY**

Eastern Division 100 E. 42nd St., New York 17
Central Division 133 So. La Salle St., Chicago 3
Pacific Division Russ Building, San Francisco 4



CAN YOU READ ALL OF THIS?

From big, bold letters down to the tiniest type faces for mandatory information, your message will come through sharp and clear with Continental's masterful lithography. Why not call today?

Behind today's best sellers

**THE CUSTOM
ENGINEERING,
DEPENDABILITY AND
ECONOMY OF**

Packomatic
AUTOMATIC PACKAGING

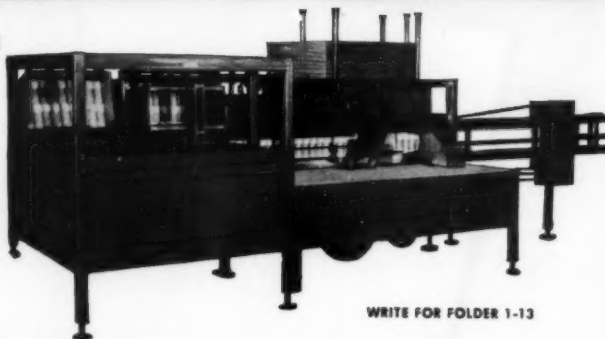
Whatever your shipping container requirements, there's a custom-engineered PACKOMATIC machine to reduce production costs and increase daily output.

For multiple loading of Simoniz liquid wax, a PACKOMATIC Automatic Case Opener and Loader—one of several PACKOMATIC machines used by Simoniz—sets up flat corrugated cases for automatic loading. Another PACKOMATIC machine imprints lot numbers and shipping data on four sides before discharging carton to a PACKOMATIC Case Sealing machine. Fully-automatic, of course.

But regardless of your equipment budget or the degree of automation you require, there's a PACKOMATIC that can pay its way quickly in your plant. There's a machine to open cases, or load, or seal or imprint—or do any combination of these operations.

AUTOMATIC CASE OPENER AND LOADER

Depending upon the size unit to be loaded, proportion and packing arrangement of the cases, you can package 20 or more cases per minute on this machine, custom-engineered by PACKOMATIC to your needs. Multiple tier loading is used for packing such varied items as breakfast cereal, petroleum products, synthetic detergents. Phone collect, or write for literature about the advantages and economy of PACKOMATIC packaging.



WRITE FOR FOLDER 1-13

Other PACKOMATIC machines include the Bale Sealer—Case Sealers—Opener-Loaders—Case Imprinters—Telescoping Volumetric Filler—Packer-Gluers. Units available, semi-automatic or fully-automatic depending on your needs.

Over 50 years' experience in Customized Packaging Equipment

J. L. FERGUSON COMPANY Joliet, Illinois

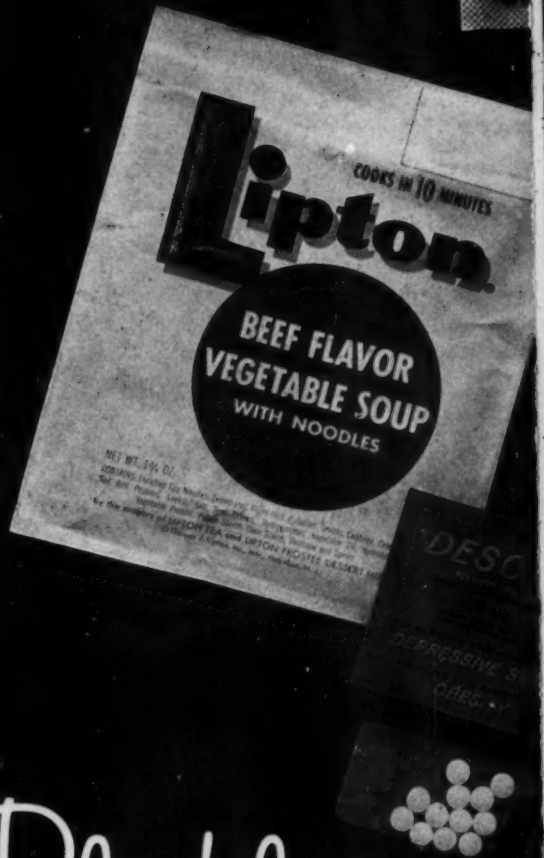
New York, Chicago, Cleveland, Boston, Tampa, Baltimore, Portland, Denver, Los Angeles, San Francisco, Seattle, New Orleans, Louisville, Kansas City and all principal Canadian cities.

Here's Packaged
Proof Aplenty of how

readily
LAMINATES
to most any material

- TO • *better the appearance*
• *insure positive seal*
• *better the protection*

OF A HOST OF
FAMOUS PRODUCTS



Pliofilm
by



Every single one of the packages
pictured on these pages
better protects the product it holds
because every single one uses

LAMINATED

Pliofilm

HERE'S WHY:

- | | | |
|--------------------------------|----------|---|
| LOW-COST PROTECTION | 1 | PLIOFILM provides an extremely effective protective barrier <i>at low cost</i> |
| LAMINABILITY | 2 | PLIOFILM readily laminates to itself, to other films, to paper or foil and combinations thereof |
| HEAT-SEALABILITY | 3 | PLIOFILM heat-seals readily and positively at a wide range of temperatures on high-speed automatic packaging machines |
| MOISTUREPROOF | 4 | PLIOFILM has the moistureproof quality so ideal for the packaging of hygroscopics, great for liquid pouches too |
| NO PINHOLES | 5 | PLIOFILM insures freshness, provides an absence of pinholes—forms a lasting, tough, airtight weld that is as strong as the package itself throughout the life of the package |
| GREASEPROOF | 6 | PLIOFILM is greaseproof, as perfectly exemplified by the packaged nuts shown on the back of this page, and as has been discovered by countless bacon packers |
| DIMENSIONAL STABILITY | 7 | PLIOFILM is dimensionally stable, wrinkle- and stretch-resistant — keeps products fresh <i>and</i> fresh-looking |
| OPTIMUM GAS TRANSFUSION | 8 | PLIOFILM has optimum gas transfusion rate |
| EXCELLENT TRANSPARENCY | 9 | PLIOFILM produces excellent transparency, as shown by the samples on these pages |

**ISN'T IT TIME YOU INVESTIGATED THE ECONOMICAL LAMINATING MATERIAL
THAT OFFERS ALL THESE QUALITIES?**

Ask for the facts from your Goodyear Packaging Engineer
The Goodyear Tire & Rubber Company, Inc., Packaging Films Dept. T-6418, Akron 16, Ohio

GOOD THINGS ARE
BETTER IN

Pliofilm



PLIOFILM laminations available from leading converters
Pliofilm, a rubber hydrochloride — T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

**Turn the page to see some other members of the Family
of Fine Products which have discovered PLIOFILM**

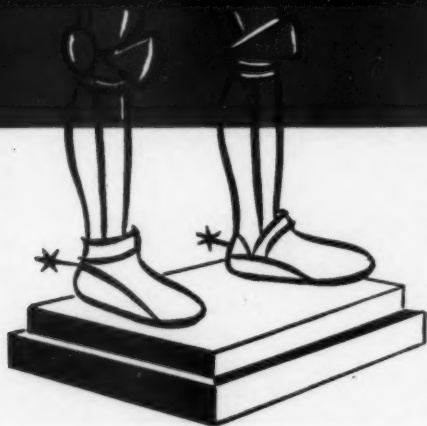


Pliofilm



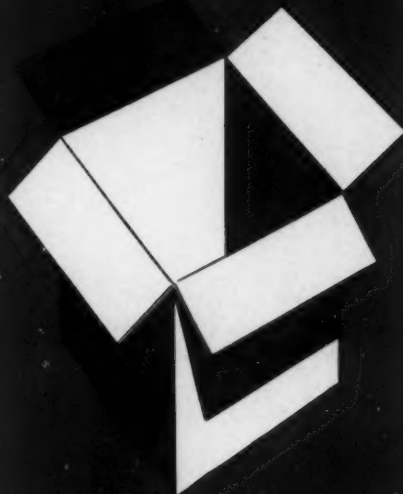


SPECIALIZED PROTECTION



Guarding a warrior in years past or guarding a product today is a job for skilled craftsmen. A well fabricated armor was often the difference between life and death. A well fabricated container can represent the difference between profit and loss.

Central Fibre prides itself on the care and skill that goes into every product it manufactures. Each is individually developed to meet your exact requirements for maximum protection.



NEW IN *Dominance* OLD IN *Skill*

Central Fibre Products Company is new as a dominant organization in the paperboard industry, however, as a consolidation of some of the oldest mills and plants in America, it represents a considerable wealth of skill and know-how. This combination of new vitality and old craftsmanship has been responsible for Central Fibre's unusual growth. Let us show you how it can provide for you a better resource for your container requirements.

CENTRAL FIBRE SERVES AMERICA FROM 21 CONVENIENT CITIES

PAPERBOARD MATERIALS
CORRUGATED SHIPPING CONTAINERS
CORRUGATED SPECIALTIES
FOLDING AND SET-UP BOXES
PRODUCE HOUSE SUPPLIES
MOLDED PULP PRODUCTS

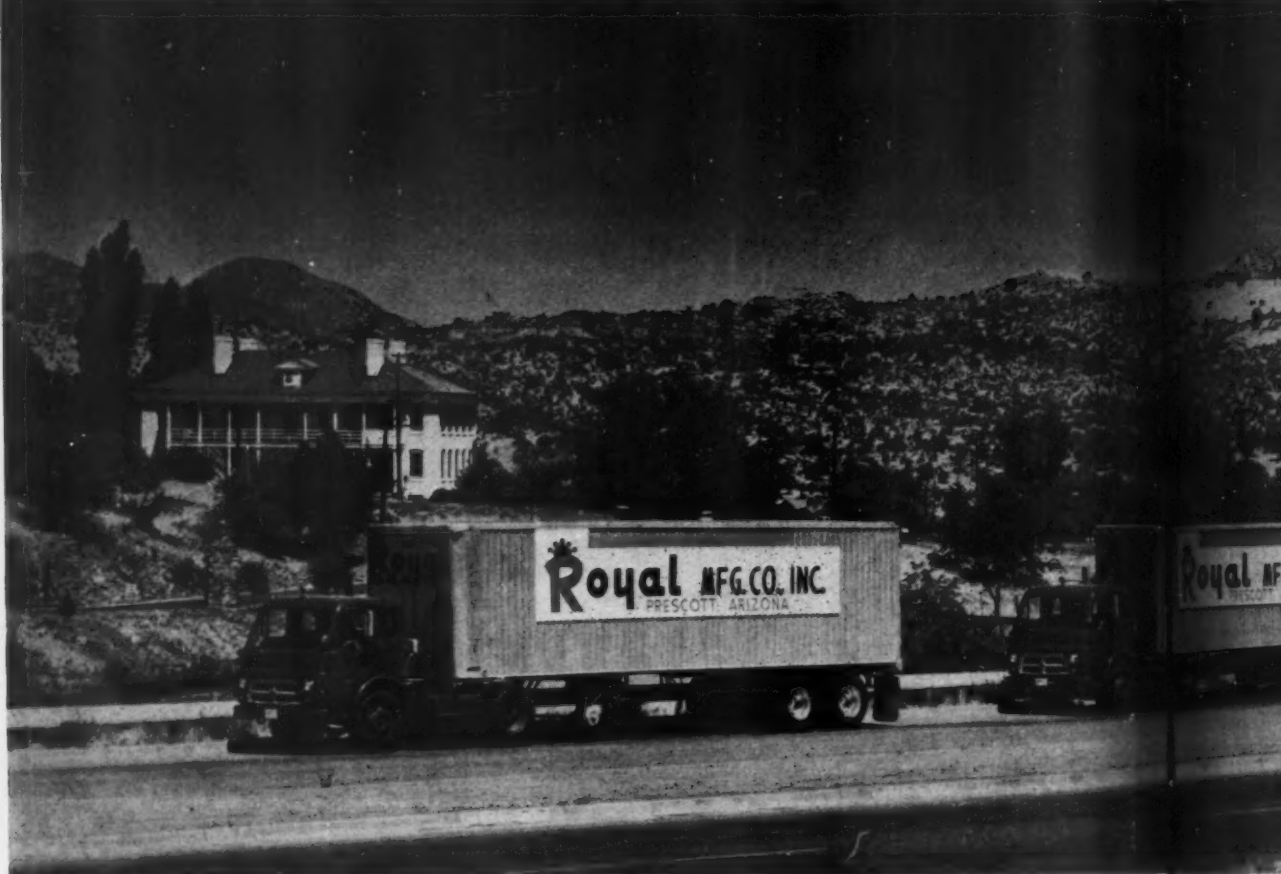


More Than 80 Years of Continuous Service and Progress

CENTRAL FIBRE PRODUCTS COMPANY

General Office, Quincy, Illinois, Phone BA 2-8700

WE'RE CLOSER



Royal NOW OPERATES ITS OWN FLEET OF MODERN TRUCKS TO GIVE YOU FASTER DELIVERY OF ROYAL PLASTIC BOTTLES.

Typical service:

Los Angeles . . .	Overnight
San Francisco . .	Second Morning
Chicago	Third Morning
New York	Fifth to Sixth Morning

Royal's volume production capacity plus new, fast truck service combine to assure you prompt delivery of the finest of plastic bottles and containers. It's a

combination that can be helpful and profitable to you in getting your product quickly on the market.

If you need a special package for a new product, or have an existing product that needs a newly designed container, choose a Royal Container of Distinction. We have complete facilities to design, engineer and produce private brand molds. You'll find the cost surprisingly low.

THAN YOU THINK!



For even faster service on stock items, please contact our nearest warehouse distributor. Bottles from stock molds (1/4 oz. to 32 oz.) are stocked by:

Royal

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Berri-Ecklund
Associates
4726 Melrose Ave.

PATERSON, N. J.
Modern
Decorating Co.
155 Oxford St.

CHICAGO
Berman Bros., Inc.
1501 So. Laflin St.

MIAMI, FLA.
Magic City Bottle &
Supply Co.
1380 N.W. 23rd St.

SAN FRANCISCO
Marketing Agents, Ltd.
207 Powell St.

MONTREAL
Browns Bottle &
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1655 Des Carrières St.

Royal containers are made under U. S. Patent numbers 2,750,624 and 2,750,625.



ROYAL MANUFACTURING COMPANY, INC., PRESCOTT, ARIZONA

Consult PAMARCO first...

for ALL roll requirements



PRECISION ROTOGRAVURE BASE CYLINDERS

High accuracy cylinders that assure quality at highest speeds, retain accuracy in hard service

Ground finish on journals and face insures absolute concentricity, diameters "on the nose." Proven method of construction insures permanent accuracy. Rigid inspection eliminates down-time due to reworking and fitting. With or without copper plating.



NO-FLEX FLEXOGRAPHIC PLATE ROLLS

Permit higher press speeds, closer printing tolerances and finer Flexographic printing

Tubular design for minimum weight, yet integral in construction for maximum rigidity. All surfaces ground to guarantee closest tolerances on diameters and concentricity. Balancing insures true "kiss impression" at high speeds. Stronger than solid steel.

THE EXCLUSIVE PAMARCO PROCESS FUSES THE ENTIRE JOINT INTO ONE SOLID MASS, INSURING EXTREME RIGIDITY AND REDUCING WEIGHT



Complete Roll Service... Expanded Facilities for All Phases of Roll Manufacture!

ENLARGED PLATING FACILITIES — Both chrome and copper plating departments have been expanded to meet increased demands for plated rolls. Pamarco plating insures longer roll life.

CUSTOM CUT STEEL GEARS — Assure accurate register. All gears produced in the Pamarco plant. Specify Pamarco Gears when ordering plate rolls.

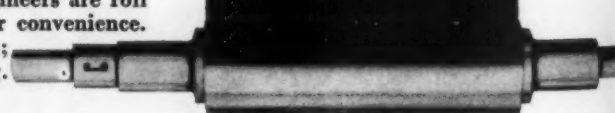
FASTER RE-ENGRAVING — Offering fastest roll re-surfacing. Rolls rebuilt to conform to original press specifications. Estimates on request.

CONSULTATION SERVICE — Pamarco sales engineers are roll experts available for consultation at your convenience. Ask for recommendation on specifications; call or write for complete catalog.

EVENFLO ENGRAVED INKING ROLLS

For smooth, uniform application of ink, solid coloring, varnishes and adhesives

Meter ink in constant volume with minimum adjustment, permit higher press speeds without loss of quality. Standard equipment on modern presses. New rolls to specifications; fast re-engraving on used rolls. Supplied with standard screens or screens designed for your requirements.



Paper Machinery & Research, Inc.
1014 OAK ST., ROSELLE, NEW JERSEY — Tel. CHestnut 5-6056

PRECISION ROLLS FOR PACKAGING, PRINTING, PLASTICS AND GENERAL INDUSTRY



Heaven Bohner

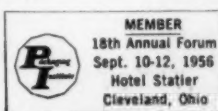
Oxford Papers

HELP BUILD
SALES



As the clock strikes one, Santa's helper is still all thumbs. But Mother smiles indulgently, anticipating Christmas morning and the irrepressible excitement of children.

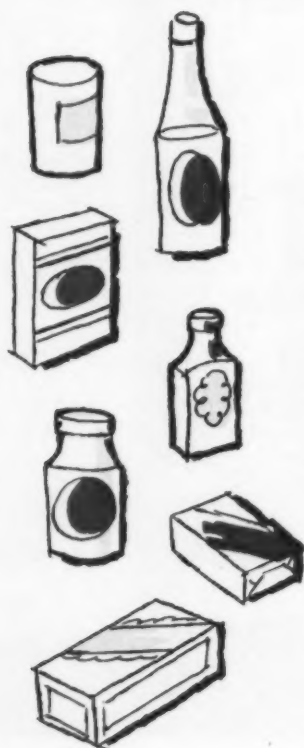
As much a part of Christmas as children's stockings and holly are the festive gift packages offered by many manufacturers and retailers. The superb printability and uniform, high quality of Oxford Papers, make them especially suitable for colorful holiday labeling and packaging. For specific examples, call your nearby Oxford Merchant or write us direct.



OXFORD PAPER COMPANY, 230 Park Avenue, New York 17, N. Y. ★ OXFORD MIAMI PAPER COMPANY, 35 East Wacker Drive, Chicago 1, Ill.

Mills at Rumford, Maine and West Carrollton, Ohio

Oxford offers these fine papers to printers and converters in the packaging field



- BOX LINER
BOX LINER, SATIN PLATE
BOX LINER, GLOSS PLATE
BOX WRAP
COATING BODY STOCK
ENGLISH FINISH LITHO
GIFT WRAPPING
GUMMING, ENGLISH
FINISH & SUPER
LAMINATING PAPER
SOAP WRAP
SUPER LITHO
UNIFLEX C1S LITHO
WAXING BASE STOCK

THE uniform quality and performance of Oxford Papers have long been recognized by the packaging industry. This dependability is assurance of long-run economy, assurance that your product will have its best foot forward.

If your specifications call for specialized or unusual papers not listed above, consult your Oxford Merchant who will arrange for an analysis of your requirements and for practical recommendations by our Research and Manufacturing Departments.

Nation-wide Service Through Oxford Merchants

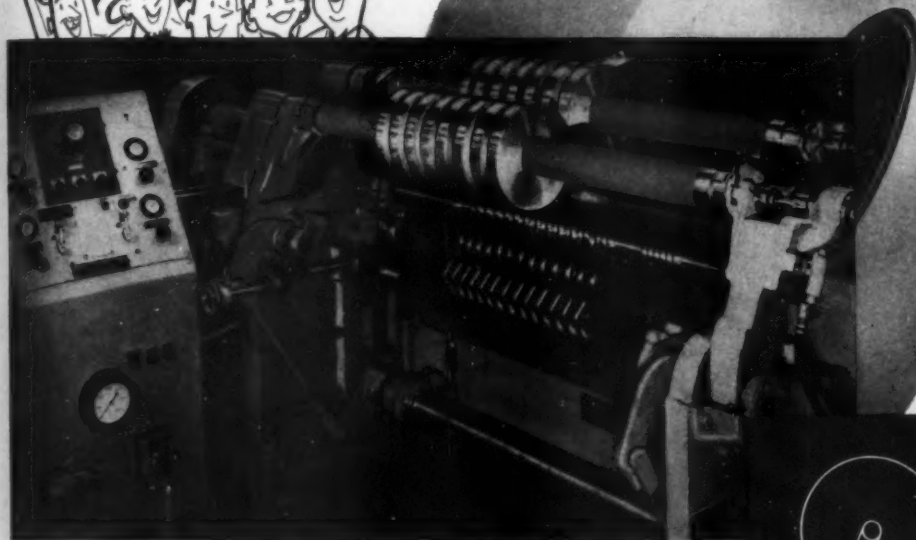
Albany, N. Y.	W. H. Smith Paper Co.
Asheville, N. C.	Henley Paper Co.
Atlanta, Ga.	Wyant & Sons Paper Co.
Augusta, Maine	Carter Rice Storrs & Benson
Baltimore, Md.	The Mudge Paper Co.
Bethlehem, Pa.	Wilcox-Walter-Furlong Paper Co.
Boise, Idaho	Blake, Moffitt & Towne
Boston, Mass.	Carter Rice Storrs & Benson
Buffalo, N. Y.	Franklin-Cowan Paper Co.
Charlotte, N. C.	Henley Paper Co.
Chicago, Ill.	Birmingham & Prouser Co.
	Bradner, Smith & Co.
	Marquette Paper Corporation
	Midland Paper Company
Cincinnati, Ohio	The Whitaker Paper Co.
	The Johnston Paper Co.
	The Whitaker Paper Co.
Cleveland, Ohio	The Cleveland Paper Co.
Dallas, Texas	Graham Paper Co.
Dayton, Ohio	The Whitaker Paper Co.
Des Moines, Iowa	Birmingham & Prouser Co.
Detroit, Mich.	Chope-Stevens Paper Co.
Fresno, Calif.	Blake, Moffitt & Towne
Gastonia, N. C.	Henley Paper Co.
Hartford, Conn.	Green & Low Paper Co., Inc.
	Carter Rice Storrs & Benson
High Point, N. C.	Henley Paper Co.
Indianapolis, Ind.	MacCollum Paper Co.
Kalamazoo, Mich.	Birmingham & Prouser Co.
Kansas City, Mo.	Birmingham & Prouser Co.
	Graham Paper Co.
Knoxville, Tenn.	Louisville Paper Co.
Little Rock, Ark.	Roach Paper Co.
Long Beach, Calif.	Blake, Moffitt & Towne
Los Angeles, Calif.	Blake, Moffitt & Towne
Louisville, Ky.	Graham Paper Co.
	Louisville Paper Co.
Lynchburg, Va.	Caskie Paper Co., Inc.
Manchester, N. H.	C. H. Robinson Co.
Memphis, Tenn.	Louisville Paper Co.
Milwaukee, Wis.	Allman-Christiansen Paper Co.
	Sensenbrenner Paper Co.
Minneapolis, Minn.	Wilcox-Mosher-Leffolm Co.
Nashville, Tenn.	Graham Paper Co.
Newark, N. J.	Bulkley, Dunton & Co., Inc.
New Haven, Conn.	Carter Rice Storrs & Benson
New Orleans, La.	Graham Paper Co.
New York, N. Y.	Baldwin Paper Co., Inc.
	Bulkley, Dunton & Co., Inc.
	Green & Low Paper Co., Inc.
	Kennelly Paper Co., Inc.
	The Whitaker Paper Co.
Oakland, Calif.	Blake, Moffitt & Towne
Omaha, Neb.	Western Paper Co.
Pawtucket, R. I.	Carter Rice Storrs & Benson
Philadelphia, Pa.	Atlantic Paper Co.
	Wilcox-Walter-Furlong Paper Co.
Phoenix, Ariz.	Blake, Moffitt & Towne
Pittsburgh, Pa.	Brubaker Paper Co.
	General Paper Corp.
	C. H. Robinson Co.
Portland, Maine	Blake, Moffitt & Towne
Portland, Oregon	Blake, Moffitt & Towne
Reno, Nevada	Blake, Moffitt & Towne
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St. Louis, Mo.	Birmingham & Prouser Co.
	Graham Paper Co.
	Shaughnessy-Kniep-Hawe Paper Co.
	Tobey Fine Papers, Inc.
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San Francisco, Calif.	Blake, Moffitt & Towne
San Jose, Calif.	Blake, Moffitt & Towne
Seattle, Wash.	Blake, Moffitt & Towne
South Bend, Ind.	Birmingham & Prouser Co.
Spokane, Wash.	Blake, Moffitt & Towne
Springfield, Mass.	Carter Rice Storrs & Benson
	Mill Brand Paper
Stockton, Calif.	Blake, Moffitt & Towne
Tacoma, Wash.	Blake, Moffitt & Towne
Toledo, Ohio	Paper Merchants, Inc.
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OXFORD PAPER COMPANY, 230 Park Avenue, New York 17, N.Y. ★ OXFORD MIAMI PAPER COMPANY, 35 East Wacker Drive, Chicago 1

Mills at Rumford, Maine, and West Carrollton, Ohio

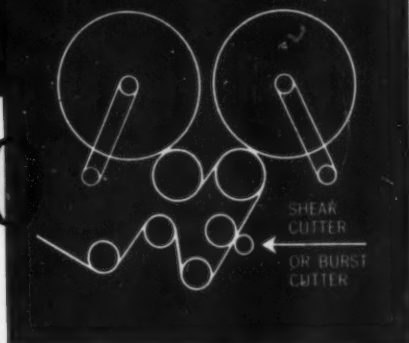


Can you meet the big demand for new FOLL wraps?



YES...with the new 500

The new Camachine 500 is ideally suited for slitting and winding hard and soft aluminum foil, or foils laminated to paper or plastics. The sensitivity and accuracy of both the unwind and rewind controls make it possible to produce top quality, narrow width rolls up to 20" in diameter at speeds up to 2000 feet per minute.*



The 500 is available in other models equipped, as shown in the above threading diagram, with individual rewind drums and individual rewind drives. This arrangement permits flexibility when separating two ply foil at high speeds and gives complete assurance of perfect rolls. 36" diameter rewind capacity is available in heavier models for both the separating operation and for single ply webs.

Here, for the wind-up end of your production line, is a machine that will protect profits on your entire plant operation. The 500 is easy to operate, exceptionally fast, and has earned a reputation for dependable, top quality production. Call, or write to Cameron for technical information.

*Speed depends on characteristics of material, strip width and roll diameter.

**SEE THE
CAMERON
TYPE 550**

**AT THE
PMMI
SHOW
BOOTH 112**

IT PAYS TO WIND UP WITH A *Camachine*

CAMERON MACHINE COMPANY • 61 Poplar Street • Brooklyn 1, N. Y.

SO B-I-G!



It's a bore when a man boasts how powerful he is . . . but it's an asset to you to deal with strong, powerful suppliers, especially when it comes to solving difficult shipping container problems! When spoilage or breakage or other shipping-worry-makers bring you customer complaints and money losses . . . call in National Container! Whatever your products . . . perishable, fragile, weighty or bulky . . .

National Container experts bring you the *tried-and-proven* experience of 28 years of successful service to the giants of industry. Controlling every step of production . . . from timberlands to finished corrugated shipping containers and multiwall bags . . . National Container offers you Quality control in every process.

• 63 Sales Offices . . . one near you. Call us today!

NATIONAL CONTAINER CORPORATION

Executive Offices: SEVEN CENTRAL PARK WEST, NEW YORK 23, N. Y.

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Background

for

packaging

Notes,
quotes
and comments

Male or female? What's the best sex appeal in a package? *McCall's* had 500 housewives keep a diary of all supermarket purchases for one week and found that wives determined the brand in 69.4% of all purchases and actually bought 73.6%. Husbands determined brand for 17.5% of purchases, actually bought 17.9%. Husband's influence is strongest in choice of coffee brand (28.3%), children's strongest in candy bars (24.4%). Surprisingly, children made the brand choice in only 3.5% of purchases of cold cereal.

Interpret retail sales reports by discounting automobile figure, lumped with other retail sales in Government's over-all report. Auto sales are languishing because of overselling last year. While auto sales in March were down 3% from a year ago, all other groups were up: apparel 26%, gasoline 14%, general merchandise 13%, foods 12%, liquor 20%, drugs 17%. We're heading for another record year in packaged products.

Sales appeal of foil is demonstrated in what's happening in bar toilet-soap field. Lux's great success in glittering gold foil wrapper is forcing competitors to follow suit, although they complain it's sheer eye appeal—that foil protection is not needed. Already in test markets are foil wraps for Jergens' Woodbury, P & G's Camay and Lever Bros.' Dove; Colgate's Palmolive is on the verge.

Watch trading stamps for unexpected impacts on merchandising. Retail merchants are estimated to be paying nearly half a billion dollars annually to some 370 trading-stamp companies and pay from 2 to 3% of gross sales for stamps. This makes rack merchandisers happy, for they reason that food stores must push harder and harder on high-margin, non-food items to make up the cost; they just can't do it on foods.

'Thermoforming,' suggested by May lead article in MODERN PACKAGING as the best all-inclusive name for forming of sheet plastics under heat—whether by vacuum, drape or pressure methods—is winning quick acceptance in industry. Robert N. Fisher of Stanley Works recommended it to Society of Plastics Industry in recent address on this new and booming branch of packaging.

Folding-box makers foresee an opportunity to increase their business from its \$850 million in 1955 to \$1½ billion by 1965. Only about \$150 million of the potential, estimated by FPBA Director Gustav L. Nordstrom, is attributable to population growth; there is room right now, he says, for greater use of folding cartons amounting to \$220 million a year in the grocery field; \$100 million in department stores; \$80 million in tobacco, and \$100 million in drugs, hardware, toys and paper goods.

Single-use tubes of extruded plastic, with patented "squeeze-to-open" closure (see "Miniature Squeeze Tube," MODERN PACKAGING, Jan., 1956, p. 98), aim for the single-service institutional food field. For food uses, tube will be made of FDA-approved plasticized clear polyvinyl chloride. Its promoters believe it will be neater and more convenient for individual servings of jellies and condiments, in sizes from ½ oz. up.

Packagers note claims for new Italian plastic, polypropylene, which is said to provide a clear film cheaper, stronger and more heat resistant than polyethylene, without the waxy feel. The film was shown in New York recently by Dr. Giulio Natta, its discoverer, who said the Montecatini

industrial group had reached pilot production in Italy and was building a commercial plant; U. S. licensees are sought. U. S. chemists concede the plastic should be low cost, because its basic ingredient, propylene, is cheaper and more abundant than ethylene, but will await further data on its packaging qualities.

Polyester film is moving fast. With a technique for combined solvent and heat sealing only recently perfected to permit handling on standard cellophane wrapping machines (see "Machine Handling of Polyester Film," MODERN PACKAGING, p. 177, this issue, and "Bundling in Polyester Film," April, 1956, p. 89), Du Pont now discloses that an even simpler sealing method for Mylar is on the way. A heat-seal coating, to be applied to the film during manufacture much as heat-seal lacquer is applied to cellophane, has been developed and construction of coating equipment will be started at Du Pont's Circleville, Ohio, plant next month, to go into operation within a year. Experimental quantities of coated Mylar are already available for evaluation.

Department stores were told, at the trail-blazing special three-day packaging clinic of the National Retail Dry Goods Assn., in New York, that packaging is a manufacturing cost and almost always must be borne by the manufacturer. But, retailers were warned, a manufacturer will assume the packaging burden only if he sees extra profit to offset the extra cost. And, said *Jack Welsch*, vice president of Exquisite Form Brassieres, Inc., "it takes an awful lot of extra volume to show an awful little extra profit."

Seamless capsule, which can be made either of gelatin or plastics, makes its bow with big hopes for food flavorings as well as unit packaging of foods themselves. Process permits a thinner coating, which makes it easier to dissolve the coating when capsuled flavoring is added to prepared foods. One large pickle packer uses it to add oil of dill to bottled pickles. Capsules, it is claimed, can be made much smaller and much larger than present sealed type.

Litterbugs worry container manufacturers. Vermont actually has passed a law prohibiting the sale of beer in non-returnable bottles and in several states bills have been proposed to impose special taxes on manufacturers of disposable containers to help pay for highway clean-up. In some cities, local regulations are being discussed to outlaw paper containers.

How big are fibre boxes? *Malcolm K. Whyte*, counsel for the Fibre Box Assn., testifying in Washington against amendment of the Robinson-Patman Act, disclosed that 95 billion square feet of fibre boxes, valued at over \$1½ billion, were produced by the industry's 350 plants last year.

Key to leadership in packaged products, says *Market Analyst A. C. Nielsen*, is an aggressive policy toward innovation. Mr. Nielsen told American Institute of Baking that of 100 leading brands in 1942, 30 had lost their leadership by 1948. Nine of these 30 new leaders were displaced by other new brands by 1953 and another nine new brands appeared in the top 100 in 1954. Of the 48 leaders who lost leadership at one time or another during the 12-year span, he said, 31 were clearly beaten by a competitor's improved package and/or product.

Example of growth that should be impressive to manufacturers and users of today's newer forms of packages is found in canned foods. Canned foods 50 years ago had a greater struggle for consumer acceptance than aerosols or squeeze bottles have today. Yet they have grown 1,100% in 50 years—from 50 million cases to 1905 to 625 million in 1955.

Background

for

packaging

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Catalin Styrene Adds a Sales-appealing Plus to Gift Packaging!

In great numbers, exquisitely designed stock containers—molded of CATALIN STYRENE, the gem of plastics—are joining manufacturers' sales staffs . . . and proving their worth!

Offering ample interior open space or compartmented tier-tray effects, they provide for generous packing. Manufacturers who previously depended upon single-piece retail sales, can now *wrap* multiple units into a one-package promotion—and surround the ensemble with irresistible gift appeal. Very few materials can vie with the beauty, color and crafted quality of CATALIN STYRENE. It is the *sales plus* packaging medium. Too, its low cost encourages maximum exploitation. Note also that re-use advantages play an excit-

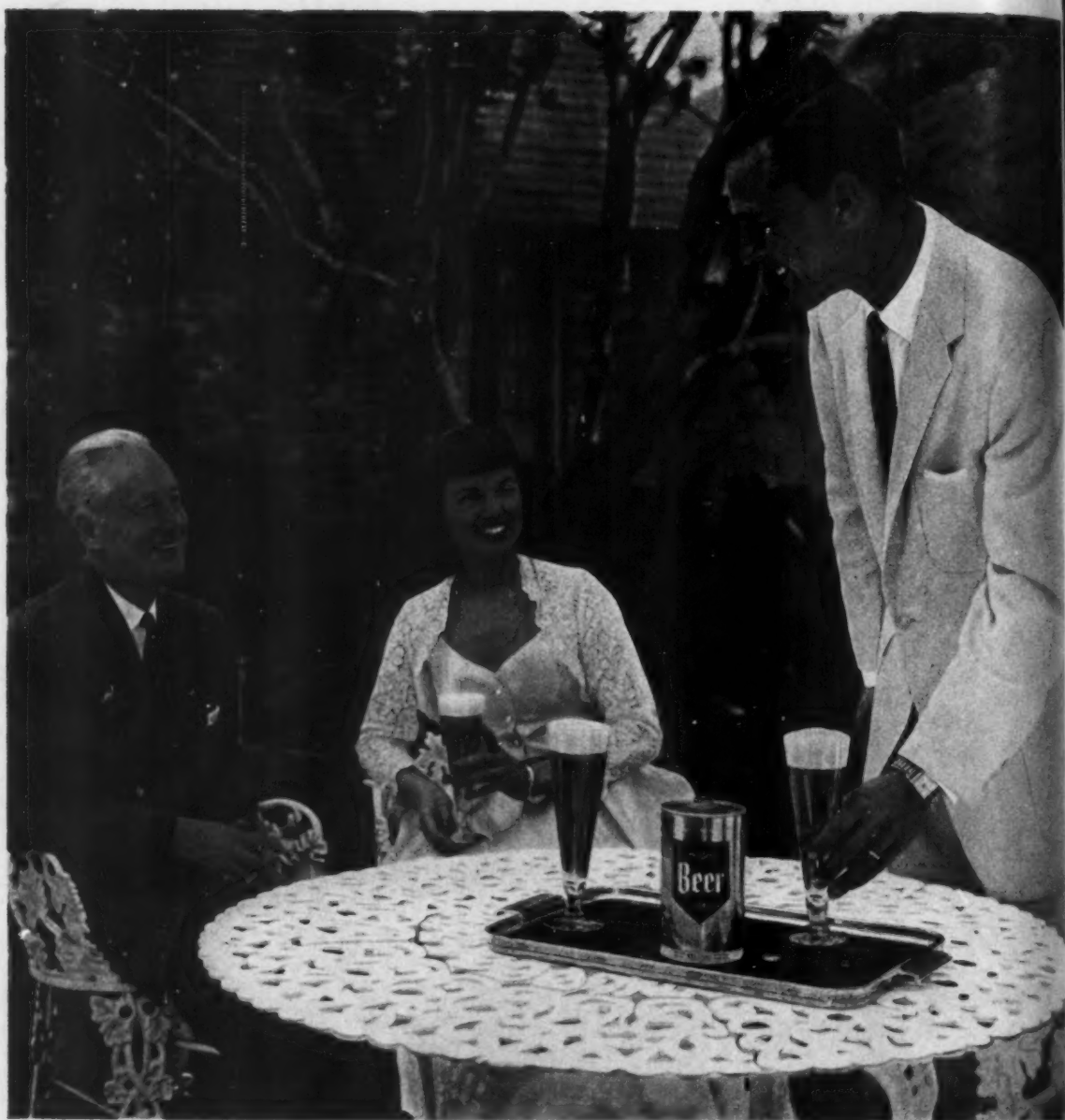
ing, highly important role. Cases molded of CATALIN STYRENE are structurally strong and most appropriately adaptable for continued service as jewelry chests, sewing boxes, cosmetic containers. And yes, when the occasion arises, the gift's recipient can instantly convert the "handled" unit shown above into a style-of-the-moment plastic handbag!

Packaging Containers featured are molded by Plastic Jewel Co., Inc., 1112 Brook Ave., Bronx 36, N. Y.

CATALIN CORPORATION OF AMERICA
ONE PARK AVENUE • NEW YORK 16, N. Y.



In addition to Styrene, Polyethylene and Nylon Molding and Extrusion Compounds, Catalin chemical products include a wide range of Urea, Phenolic, Cresylic, Bisacrylon, Melamine and Styrene Resin formulations



New for brew... new for you... it's another Canco "first"

It's a NEW-STYLE full quart can . . . the first really new development in beer cans in years. Invented by American Can Company to provide economy and a new convenience in one neat modern package.

You'll be seeing lots of these new cans, for their popularity is assured. The new-style crown top can stacks easily. No opener needed—the cap pries off with the use of any other can. The quarts require less space. They're lighter and easier to carry; ideal for gatherings and they

chill more quickly, too.

Trade-marked "Keglined," this new container has all the quality features that have made Canco's original beer can the most popular choice among brewers. They know that in cans trade-marked "Keglined," beer tastes the way it should.

The new quart beer can is another Canco "first," one of many. If you have a packaging problem, why not talk to Canco. The next Canco "first" could be for you.



"Can do!"... *that's the spirit of American Can Company*

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AUGUS



CMC GLU-TAPE
Fully Automatic Case
Gluing and Taping Machine

Automatically Glues and Tapes top and bottom in one pass

1 minute size adjustment even when all carton dimensions change.

Controlled glue application—glues any part or the entire flap.

Gluing or taping or both methods of sealing top and bottom can be performed on this machine.

Requires only 16'x4'2" floor space.

Many additional features.
Send for Bulletin No 10

Automatically Fills and Seals Continuously

Packages granular products automatically at high speed.

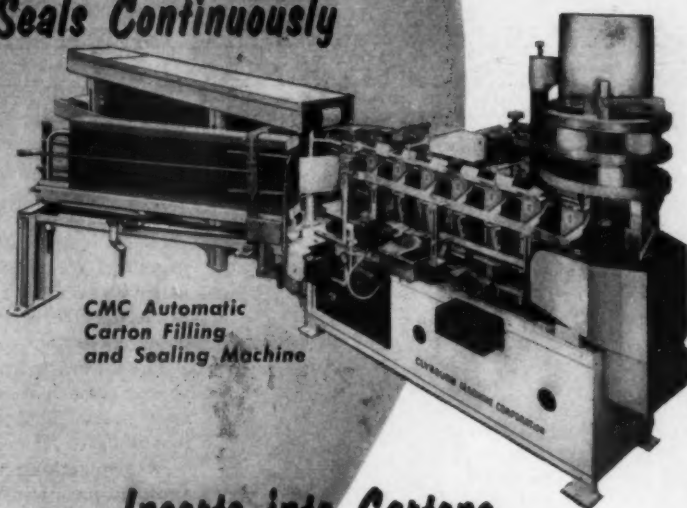
Special machines available for packaging powders and long cut or bagged products.

Measure by volume, net weight or auger feed.

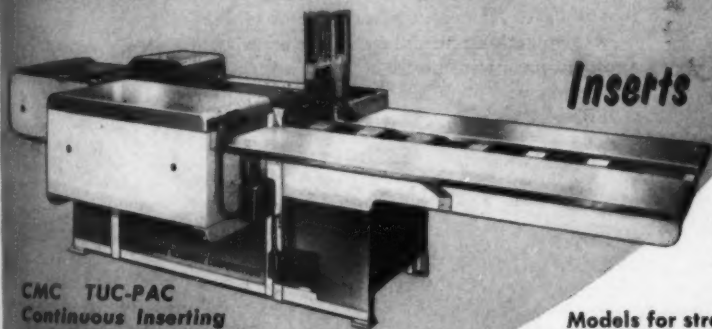
Requires less than half hour set-up time even when all carton dimensions change.

Uses only 14'2" x 2'2" floor space.

Send for Bulletin No. 20.



CMC Automatic
Carton Filling
and Sealing Machine



CMC TUC-PAC
Continuous Inserting
and Cartoning Machine

Inserts into Cartons Continuously

Automatically cartons bagged or solid products such as powdered milk, bar soap, candy bars, ice cream bars.

Models for straight or reverse or glue end cartons.

CLYBOURN MACHINE CORPORATION
6479 N. Avondale Ave., Chicago 31, Illinois
*Dependable Equipment
for the Packaging Industry*

No empty cartons. Does not feed carton when conveyor pocket is empty.

Speeds from 40 to 80 cartons per minute.

Many other features. Send for Bulletin No. 20.



To buy, or not to buy?



Where KVP "mouth-watering" realism pays off

It's a happy fact for most food merchandisers that so many purchases are made on impulse. When you show your food products with all their tempting table-ready appeal, you're on your way to steadily increasing sales—providing too, of course, that your packages protect goodness into the home.

KVP wrappers provide this dual service. New 4, 6, and 8-color presses can reproduce food products with natural, full-color realism. And KVP specialized papers and finishes safeguard quality and flavor from your plant to home table.

Are you taking advantage of the extra sales appeal your packages can have with the new KVP printing capabilities? A letter will bring you complete details and samples. And KVP artists will be glad to submit new selling designs at your request.

THE KVP COMPANY • Kalamazoo, Michigan



KVP wrappers include Kalapak, for frozen foods; Kalakote® for non-frozen foods; Kalafoil® for specialty foods; and Genuine Vegetable Parchment.

SPECIALISTS IN FOOD PAPERS FOR PROTECTION AND SALES APPEAL

PLANTS AT KALAMAZOO, MICHIGAN • DEVON, PENNA. • ASSOCIATED COMPANIES: KVP COMPANY OF TEXAS, HOUSTON, TEXAS • HARVEY PAPER PRODUCTS, STURGIS, MICHIGAN • IN CANADA: THE KVP COMPANY LTD., ESPANOLA, ONTARIO • APPLEFORD PAPER PRODUCTS LTD., HAMILTON, ONTARIO AND MONTREAL, QUEBEC

**IT
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UP!**

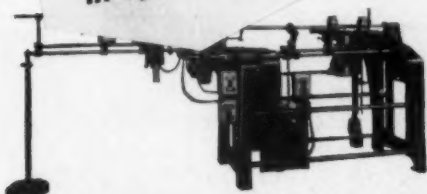
**YOU GET MORE CONTAINERS
PER \$ WITH PAPER WOUND
CANS, CORES AND TUBES**

**VISIT US AT
BOOTH 107
(PMMI SHOW)**

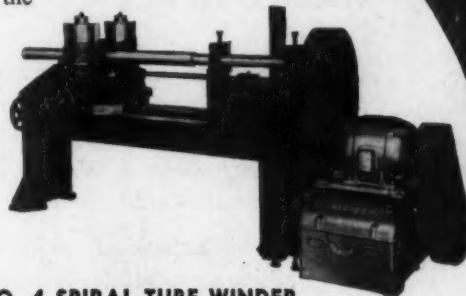
**See this
77 WINDER
in operation!**

cost

Knowlton machines are paying off TWO
winding manufacturers who have gone "paper-
logical way to solve their container cost
paper wound containers not only cost less
nite profit making advantages to sales,
) Cost conscious package people know that
even money savers that up output, last longer and
Knowlton man and get the
story.

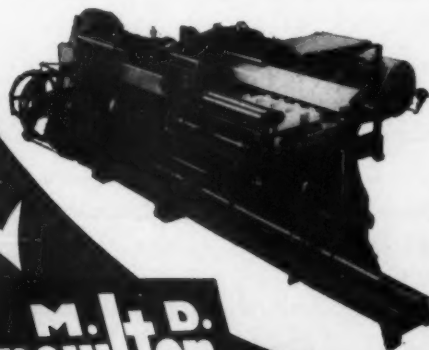


**NO. 77 KNOWLTON SPIRAL TUBE WINDER
AND CUT-OFF.** Winds paper tubes from 2 to 5 plies
and from $\frac{1}{4}$ " min. to 1" max. in diameter.



NO. 4 SPIRAL TUBE WINDER

Winds paper tubes from $\frac{3}{4}$ " to 10" diameter depending
on number of plies: 2-5 plies up to 10" diameter; 3-11
plies to 8" diameter; 12-22 plies to 6" diameter. Avail-
able with cut-offs and glue stands to fit all needs. Optional
machines for cutting tubes in single or multiple lengths,
rough or finished cores, or cutting light and heavy side
walls up to $\frac{1}{2}$ " thickness.



**AUTOMATIC CONVOLUTE
PAPER CAN WINDER**

Winds paper can bodies from $1\frac{3}{4}$ " to 8"
in diameter on the round and from $1\frac{1}{2}$ " to
8" across diagonal corners on irregular
shapes such as square, rectangular, oval, etc.

**M. D.
Knowlton
COMPANY**

To Better Serve the Packaging Needs of American Industry

CROWN ZELLERBACH

announces the integration of
**Western Waxed Paper Division and
Waxide Paper Company Division**

under the new name of

WESTERN-WAXIDE SPECIALTY PACKAGING DIVISION

To more fully meet *your* specialized packaging requirements, the modern, completely equipped plants, skilled packaging design staffs, extensive research facilities, experienced sales personnel and management of Waxide and Western Waxed have been combined in one smoothly functioning organization.

This expanded complete packaging material service awaits you at five strategically located manufacturing plants, and at sales service offices in ten important population centers across the nation. You'll find a plant or sales service office convenient to *your* production and packaging operations.

These combined Divisions of Crown Zellerbach are in the best position in their history to supply you with the specialized packaging materials you need . . . designed, produced and delivered where and when you need them.

Phone the plant or sales office nearest you for packaging materials that mean *Increased Sales . . . By Design!*



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WESTERN-WAXIDE SPECIALTY PACKAGING DIVISION

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SALES SERVICE OFFICES: Atlanta • Chicago • Dallas • Denver • Memphis • New York City • Omaha • Salt Lake City • Seattle • Spokane

Her emotions make your sale!



• • • because today's women buy with their imagination, your food product wrapper must stimulate shoppers with visions of "foods to come." That's why our scientific concept of *Taste Excitement*—the use of mouthwatering serving suggestions in proper balance with colorful, distinctive brand identification—stops the shopper and makes *impulse sales* on the spot!

But modern package design is a science that requires highly specialized knowledge and experience. Call on us to create a "package personality" that adds sales-boosting *emotional* appeal to your food product wrapper.

*Increased Sales
... by Design!*



**CROWN ZELLERBACH • WESTERN WAXED PAPER DIVISION
WAXIDE PAPER COMPANY DIVISION**

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SALES SERVICE OFFICES: Atlanta, Chicago, Dallas, Denver, Memphis, New York City, Omaha, Salt Lake City, Seattle, Spokane

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AUGUS

How to save time and money in package imprinting



Tickometer

With the Tickometer, you can count and imprint on product labels—sizes, weights, colors, dates, codes, etc.—*as needed* for current production. You cut printing costs, reduce label inventories, prevent waste of unusable pre-printed labels.

The Tickometer imprints up to 1,000 pieces a *minute*—feeds, counts and stacks automatically. It imprints anywhere on an area 2½ by ¾ inches, handles a wide variety of paper and card stocks, in sizes from 1 by 2 inches to 8½ by 15 inches. And it can be easily operated by anybody without special training.

Thousands of companies have made major savings in marking, coding, imprinting various paper forms and items—including coupons, checks, transfers, sales slips, tags, tickets, etc. And it counts so accurately that banks use it to count currency!

Learn how these aids can help your business! Call the nearest PB office for a demonstration. Or send coupon for free illustrated booklets and case studies.



Pitney-Bowes

Originators of the postage meter...
offices in 94 cities in U. S. and Canada.



Package Imprinter

With the amazing new "4800", you can also imprint cartons and other containers *as they are needed*. It cuts costs, reduces inventories, eliminates wasteful preprinting.

Sizes, weights, colors, dates, trademarks, too, can be imprinted on folding cartons, bags, envelopes—even dealer literature—at speeds up to 7,500 pieces an hour.

Easily operated by anyone, the Imprinter can be adjusted without tools. Rubber mats or type from 6 pt. up are used, and the impression surface is 4 by 18 inches. It takes material in sizes from 2½ by 2½ inches up to 18 by 18 inches—in most any finish of paper or board; in thicknesses from .010 to ¾ inches. It also prints on most plastics, cellophane, foils, etc. Liquid ink requires no mixing, dries instantly. And the PB Stacker stacks automatically, ready for distribution. Service from 272 points, coast to coast.



Pitney-Bowes, Inc.
4842 Walnut Street
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Send booklet on ☐ Tickometer ☐ Package Imprinter to:

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Address _____



Val Bauman

GENERAL MERCHANDISING MANAGER
NATIONAL FOOD STORES

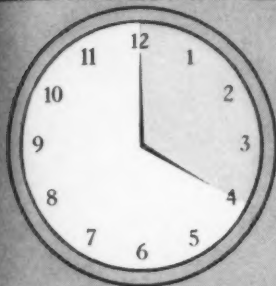
Says

"I think Rip-Open cases are the biggest advance in shipping containers in years! They save time in opening, in marking, in shelving, and in building displays to get the job done better for less labor costs in our stores. And of course they prevent injuries and damaged merchandise caused by hurried knives. The National Food Stores would prefer that all its suppliers ship merchandise to our stores and warehouses in Rip-Open Tape cases!"

See *why* Mr. Bauman says

Rip-Open cases are a boon for supermarkets!

FAST OPENING! CPS Rip-Open Tape saves up to 1/3 on carton opening time. Immediate and positive opening in a fraction of the time required by old fashioned cutting!



NO KNIVES! No knives, no razor blades, no cutting tools! That means no cuts or fingers, and fewer lost-time accidents! The safest way to open a carton is with CPS Rip-Open Tape.



EASY MARKING! CPS Rip-Open Tape exposes top of case for fast, convenient price marking. Gives positive product identification.



LESS SHRINKAGE! CPS Rip-Open Tape puts an end to damaged packages from carton opening. No more sliced or punctured packages caused by knives, razor blades or cutting tools!



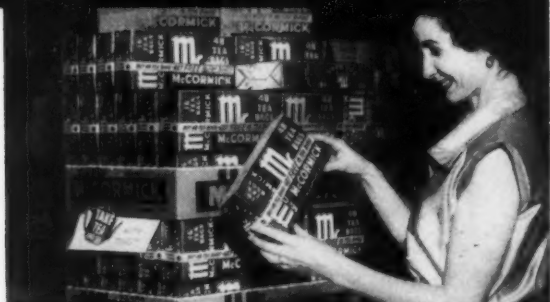
Look at the advantages CPS Rip-Open Tape gives!



FASTER SHELVING! Rip-Open cases open faster... speed up price marking... make shelving easier and faster! They also simplify stock rotation and automatically provide for more faces on the shelf!



CARRYOUT CASES! Customers like the neat carryout cases you get when you use CPS Rip-Open Tapes! They make for faster loading at the check-out counter, too!



QUICK DISPLAYS! CPS Rip-Open Tapes transform cases into self-contained trays for attractive floor and shelf displays. Builds island displays, aisle displays better. Displays are safer, won't tumble.



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**JUST ONE RUN
COMPLETES
ANY LABEL OR TAG**
on a New Era Press

- Prints any number of colors in a single run
- Prints one or both sides at the same time
- Die cuts any size, any shape with male steel-rule dies
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- Slits, perforates, numbers, punches, eyelets, and patches reinforcements—as it prints
- Delivers finished product cut-off, rewound, or zig-zag folded
- Up to 7500 impressions per hour!

Write for free New Era Bulletin today!

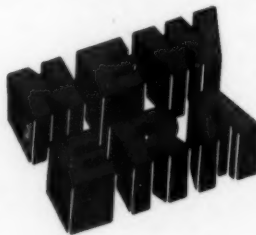
These jobs from paper roll to finished product in one run:

LABELS—gummed, ungummed, heat-seal, silk, cotton.

TAGS—merchandise, shipping, manifold.

COUNTER DISPLAYS—up to 12" x 12".

BAG HEADERS—and other specialties, forms, and tickets.



Auxiliary equipment for Stringing, Knotting, Wiring, etc. available from Graeber Stringing & Wiring Machine Company, division of New Era Manufacturing Company.

Manufacturing Co.
371 Eleventh Avenue,
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Previously we introduced Palegold "65" and
Copper "19" paper. Now we proudly present—

ARTCOTE RICHGOLD "33"

*with true gold color
high lustre
full brilliance and life*

Artcote now offers an improved, high lustre paper with true gold color—Richgold "33," available at no increase in price over Artcote's present Richgold paper. Artcote pyroxylin metallic coated papers are available in gold, silver, and copper finishes...gummed or ungummed...embossed or plain. Paper stock available in 60 lb. weight...cover stock available up to 15 point. All Artcote papers and cover stock accept halftone, four-color process, silk screen, gravure, offset lithography, letterpress and flexographic printing. Write today for sample book.

Letterpress printing on Artcote paper No. 3361 (Richgold "33" coating on No. 61 paper stock).

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**FLEXOGRAPHIC
and GRAVURE
PRINTERS**

Here's when to use **BBD's VELVATEX INK** ...and why



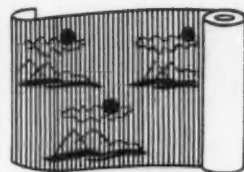
FOLDING CARTONS



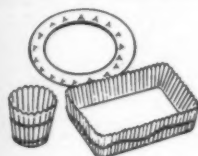
WRAPPERS



PAPER CUPS



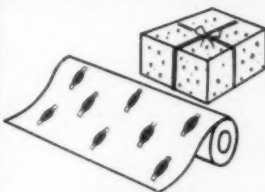
CORRUGATED
DISPLAY MATERIALS



PAPER BAKE TRAYS,
other specialties



NOTION, SHOPPING,
GARMENT BAGS



GIFT WRAPS,
TRADEMARK PAPERS



NAPKINS, DOILIES,
PLACE MATS



If you print any of the paper and board products shown above — by either flexographic or gravure processes—it will pay you to investigate BBD's VELVATEX INK.

VELVATEX is an alcohol-soluble ink that prints with a rich velvety finish on all kinds of paper and board stock. High in color strength, VELVATEX effectively hides paper structure . . . produces attractive watercolor effects by itself or, when overlacquered, vividly bright impressions. It runs beautifully on the press, gives level coverage of solids and clean, sharp impressions of small type and line detail . . . does not build up on plates or rollers, or in gravure cylinder cells.

Because VELVATEX INK has minimum penetration and tack it can be used on the lightest weight tissue without curling or wrinkling the stock. It affords very

high resistance to water, scuffing and scratching; also, being non-thermoplastic, it remains stable when exposed to temperatures as high as 500° F. Consequently, paper and board printed with VELVATEX may be corrugated, hot and cold die-cut or creased without affecting the ink's appearance.

Extremely bleed-proof, VELVATEX INK can be waxed . . . overprinted with hydrocarbon or petroleum-type lacquers and varnishes . . . and exposed to food fats without danger of running. It also may be obtained in alkali-resistant formulations for printing cartons or wrappers for soap and other alkaline products.

VELVATEX INK is available in a complete range of brilliant colors, as well as white and black. Try VELVATEX on that next job and see how well it performs.

For **FREE**
"VELVATEX INK
TECHNICAL DATA
SHEET" write to
BENSING BROS.
and **DEENEY,**
3301 Hunting Park Ave.,
Philadelphia 29, Pa.



Bensing Bros. and Deeney

Flexographic and Gravure Ink Specialists
PHILADELPHIA • CHICAGO • SAN LEANDRO, CAL.
CAMBRIDGE, MASS. • MONROE, LA.



DISTRIBUTORS:

MANTON BROS.
Toronto, Canada

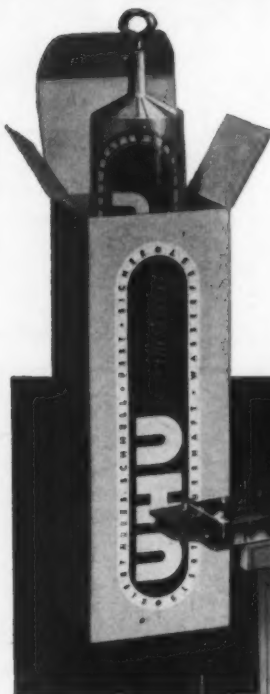
TRENAL CO.
Brussels, Belgium

COLORA, LTD.
Berne, Switzerland

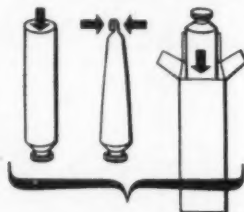
McLAURIN-JONES CO.
New York (Export)

PAMCO, INC.
San Francisco (Export)

MACHINES FOR MASS-PRODUCTION



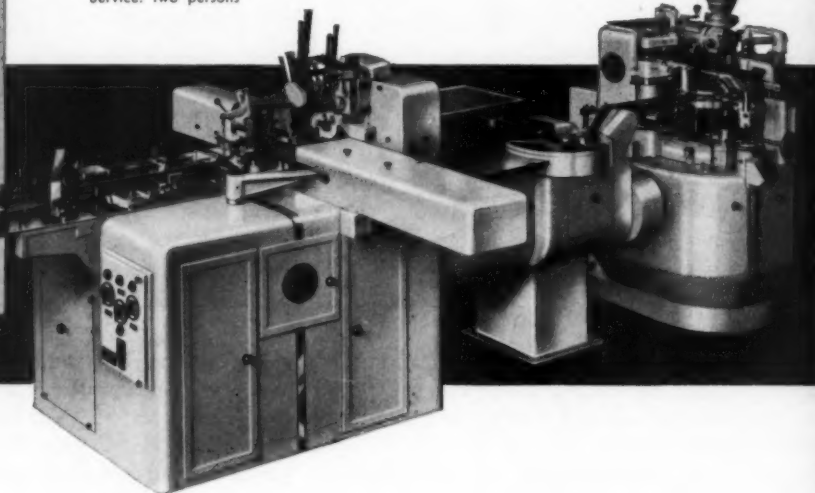
filling • closing • cartoning



in one passage through the whole plant
Service: two persons

MfM "COMBI"-PLANTS

operate more economically
increase the speed
lower the packaging costs



We deliver:

Fully automatic groups of synchronized machines for the packaging of tubes, roll-films, shaving sticks, spark-plugs, pharmaceutical products, drops, biscuits etc. Fifty years' experiences are the basis of our Manufacturing Programme.

- Filling Machines
- Wrapping Machines
- Cartoning Machines
- Packaging Machines
- Tube Filling and Closing Machines



INDUSTRIE-WERKE KARLSRUHE Aktiengesellschaft • KARLSRUHE • Germany

Correspondent's office: H. J. Jensen, 350 Broadway, New York, N. Y.



Attractive, shock-proof packages made from **DYLITE*** plastic

*Protect the most fragile items! Strong . . . Light.
Approved for mailing without padding! Won't dust, crumble
or scratch soft finishes. Rich in color . . . will double as sales
displays. Where to get them? Write to
Koppers for free Directory of Plastic
Packaging Suppliers.*

DYLITE packages molded by:

Ambassador Plastics & Manufacturing Corp.
620 North Michigan Avenue
Chicago 11, Illinois

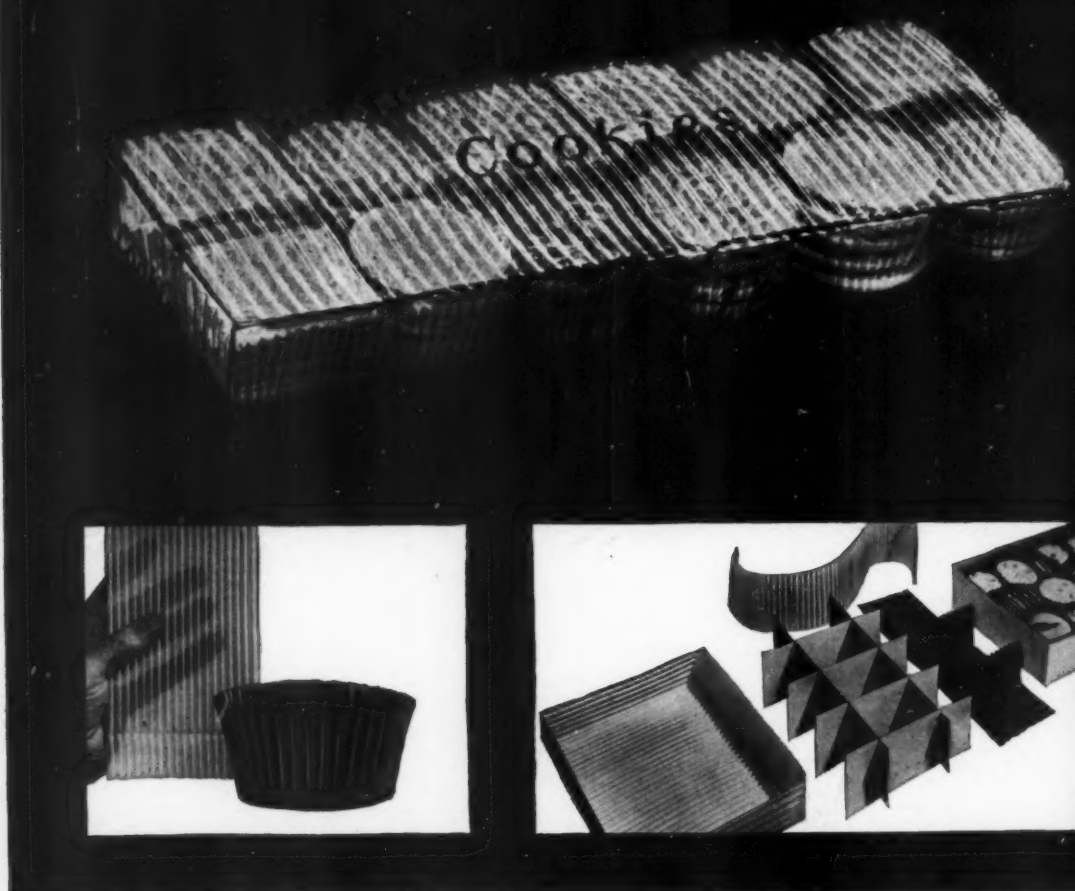
**Koppers Trademark.*



DYLITE
Polystyrene
made by
KOPPERS COMPANY, INC.
CHEMICAL DIVISION
PITTSBURGH 19,
PENNSYLVANIA

SALES OFFICES: NEW YORK • BOSTON • PHILADELPHIA • ATLANTA
CHICAGO • DETROIT • HOUSTON • LOS ANGELES • SAN FRANCISCO
In Canada: Dominion Anilines and Chemicals Ltd., Toronto, Ontario

X-ray photograph of cookie package



GLASSINE PAPER

The Inside Story on Cookie Packaging

The high shortening content in fresh, crisp cookies will seep through ordinary papers, accelerating rancidity development and resulting in a stained, unsightly package. However, fluted cups, corrugated pads and dividers made of glassine easily and economically solve this *inside* problem.

Dense, greaseproof Rhinelander glassine prevents staining. Shock protection for delicate baked goods is also provided. And, glassine's gloss and color give a rich gift-package look to the box.

Glassine is also used for cookie bags and outer wraps where its brilliance and fine printing qualities can be utilized. Rhinelander makes a wide variety of glassine and greaseproof papers for many types of protective packaging.

They are available in assorted colors and in waxed*, laminated and coated grades for moisture-resistant packaging. Write for samples, stating your application.

*Waxed and printed grades available through leading converters.

RHINELANDER PAPER

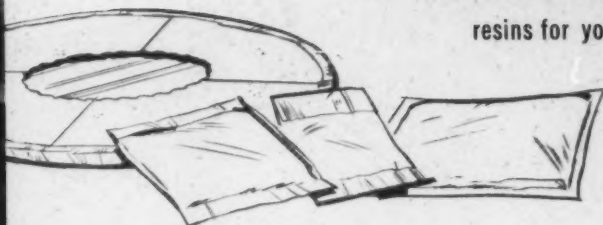
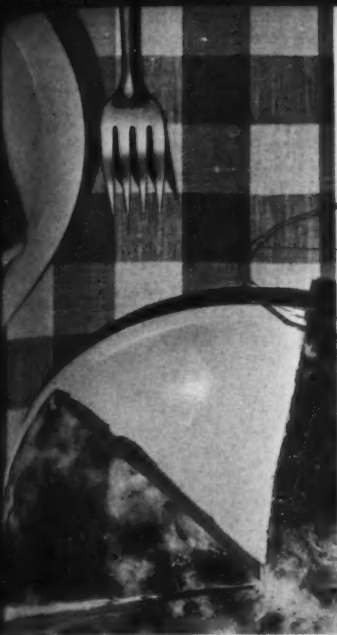
Rhinelander Paper Company, Rhinelander, Wisconsin



There is a difference in polyethylenes...specify

Du Pont ALATHON®

resins for your packaging needs



If this pizza pie had come all the way from Italy, it would not have lost any of its superb flavor. That's because its freshness is assured with packaging of Du Pont ALATHON polyethylene resin. (Packaging of ALATHON by Standard Packaging Corporation, Clifton, New Jersey.)



The world's great musical treasures are preserved on these hi-fi records. The records themselves are protected against dirt and scratching with envelopes of Du Pont ALATHON. (Envelopes of ALATHON by Shore Line Industries, Clinton, Connecticut.)



In ancient times salt was so scarce it was used as a medium of exchange. Today, man has a plentiful supply on hand ready to flavor his food and supplement his diet. This container has lids extrusion-coated with Du Pont ALATHON, to protect the salt from moisture. (Caps of ALATHON supplied by the Guardian Paper Company, Oakland, California, for Leslie Salt Company, San Francisco, California.)

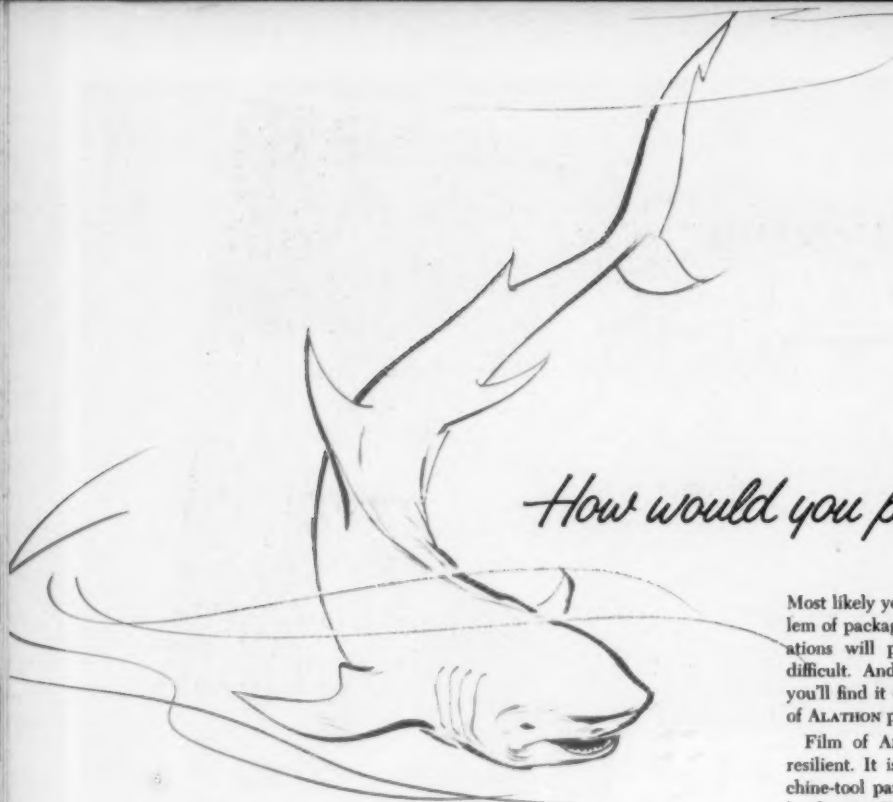
This novel container is used to package notions in stick form for easy application. Instead of being squeezed out, the material is pushed up from the bottom. Packaging innovations, such as this, result from an imaginative use of Du Pont ALATHON. (Containers of ALATHON by Celluplastic Corporation, Newark, New Jersey.)



BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY

Polychemicals Department

OVER



How would you package a shark?

Most likely you will never be faced with the problem of packaging a live shark. But packaging situations will probably arise which seem equally difficult. And whatever your particular "shark," you'll find it easier to package when you use film of ALATHON polyethylene resin.

Film of ALATHON is heat-sealable, tough and resilient. It is excellent for packaging sharp machine-tool parts, screws and other hard-to-handle hardwares. Even if the film is punctured, the great notch resistance of ALATHON will retard further tearing.

The remarkable impermeability of ALATHON to grease, oil and moisture is another important factor. Although film of ALATHON can be as thin as one mil (.001"), it will protect against the migration of most food fats. ALATHON imparts no odors or taste to its contents and retains its flexibility at temperatures as low as -100° F. Thus, ALATHON is ideal for packaging frozen shrimp, sherbet (or shark).

Another consideration is the display value and sales appeal of transparent film of ALATHON. Whether the buyer is looking for shark fins or shirt fronts, the chances are he'll be sold faster if he can see your product through smart-looking packaging of ALATHON.

So the next time you are confronted with a packaging problem, whether it be tools or toys, foods or fodder, acids or alkalies, lingerie or loganberries — or sharks, remember film of Du Pont ALATHON.

There is a difference in polyethylenes
specify **ALATHON®**
for your packaging needs

E. I. du Pont de Nemours & Co. (Inc.), Polychemicals Department
Room 248, Du Pont Building, Wilmington 98, Delaware
In Canada: Du Pont Company of Canada Limited, P. O. Box 660, Montreal, Quebec

MAIL TODAY FOR ALL THE DETAILS

Please send me more information on Du Pont ALATHON polyethylene resin. I am interested in evaluating this material for:

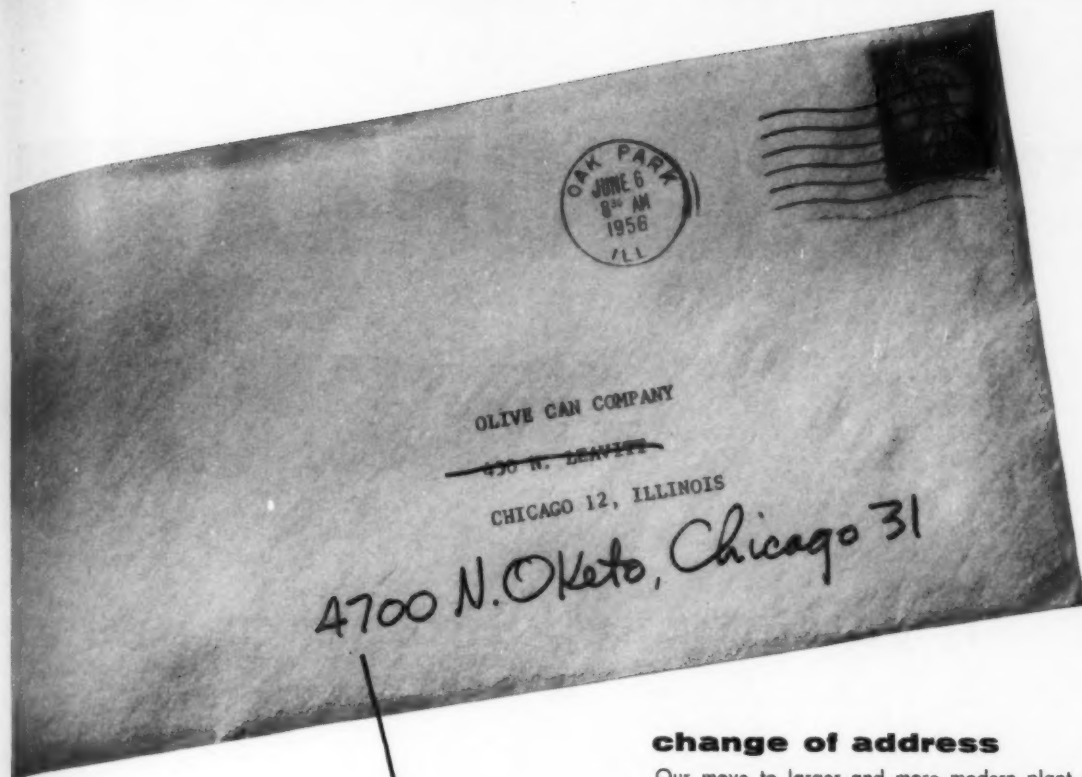
Name _____
Position _____
Firm Name _____
Street Address _____
City _____
State _____
Type of Business _____



BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

44
QUAL
AND
SERV

AUG



change of address

Our move to larger and more modern plant and offices marks another milestone in the growth and progress of our organization.

Careful consideration was given to the selection of our new location. The fine planning which has gone into plant arrangement and exterior treatment makes ours a very efficient layout.

The new building is air-conditioned, has acoustical ceilings, tile floor coverings, excellent lighting and the most modern of plant conveniences.

Here is a building that has been built expressly for the manufacturing of the finest of lithographed and plain metal containers.

As we approach our 50th anniversary in the can manufacturing field we hope that we may have the pleasure and opportunity of serving your organization.

Complete manufacturing and engineering facilities are always available to your inquiries.



44
YEARS
QUALITY
AND
SERVICE

DESIGNERS AND MANUFACTURERS PLAIN AND LITHOGRAPHED

OLIVE CAN COMPANY

METAL CONTAINERS CUSTOM OR STOCK DESIGNS
4700 N. OKETO AVENUE • CHICAGO 31, ILL.

IMPORTANT FROM

If you use cellophane, or intend to

ON AUGUST 1, 1956, a change in code letters for most Du Pont cellophane films went into effect. We believe that this simple change in designation will help you avoid possible confusion with other brand films, and assure you of the unique benefits offered by Du Pont product quality and research.

The only change made by Du Pont is to drop the letter "T" and substitute the letter "D" (for Du Pont). Designations for many specialty films exclusive with Du Pont, such as K-202 or MSC, have not been changed.

Here are a few examples of how the new code looks:

PT	becomes	PD
MT	becomes	MD
MST	becomes	MSD
MSAT	becomes	MSAD
LSAT	becomes	LSAD





ANNOUNCEMENT

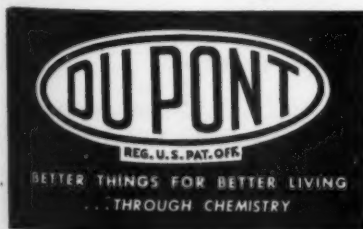
DU PONT

to use it, read this carefully...

This exclusive Du Pont code designation, "D," will have many advantages for you as a user of cellophane. It will allow you to *easily specify* films made by Du Pont, thus guaranteeing that you benefit from Du Pont's pioneering experience and continuing program of film research. E. I. du Pont de Nemours & Co. (Inc.), Film Department, Wilmington 98, Delaware.

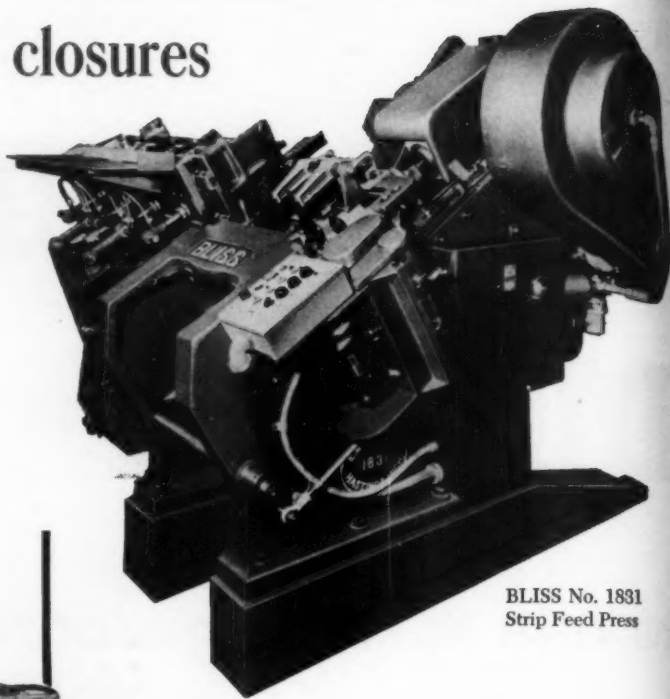
ONLY DU PONT OFFERS YOU ALL THESE PACKAGING ADVANTAGES: Over 100 varieties of

film  technical experts to advise you  consumer buying studies to guide you  powerful national advertising  to back you.

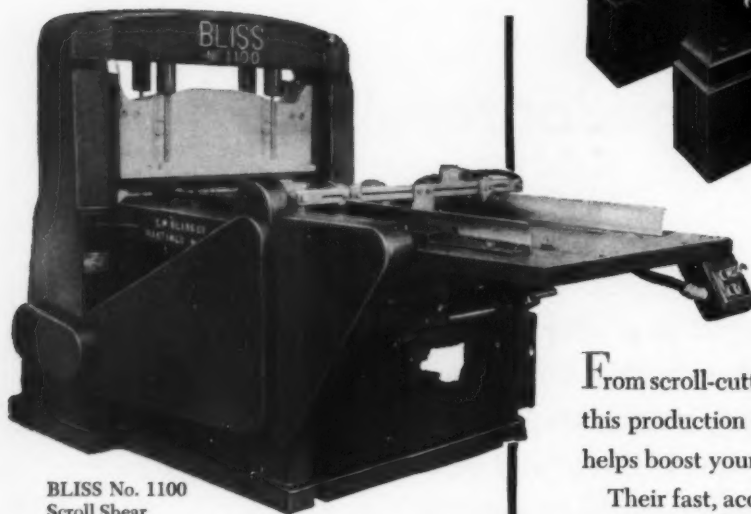


DU PONT PACKAGING FILMS
CELLOPHANE
"MYLAR" POLYESTER FILM
ACETATE FILM

You get uniform closures
at high speed
with this
production
team



BLISS No. 1831
Strip Feed Press



BLISS No. 1100
Scroll Shear



E. W. BLISS COMPANY
Can Machinery Headquarters
50 Church St., New York 7, N.Y.
CAN MACHINERY FACTORY
Hastings, Michigan

*BLISS is more than a name
... it's a guarantee*

From scroll-cutting tinplate to forming closure blanks, this production team gives you **uniform closures**, and helps boost your output while cutting costs.

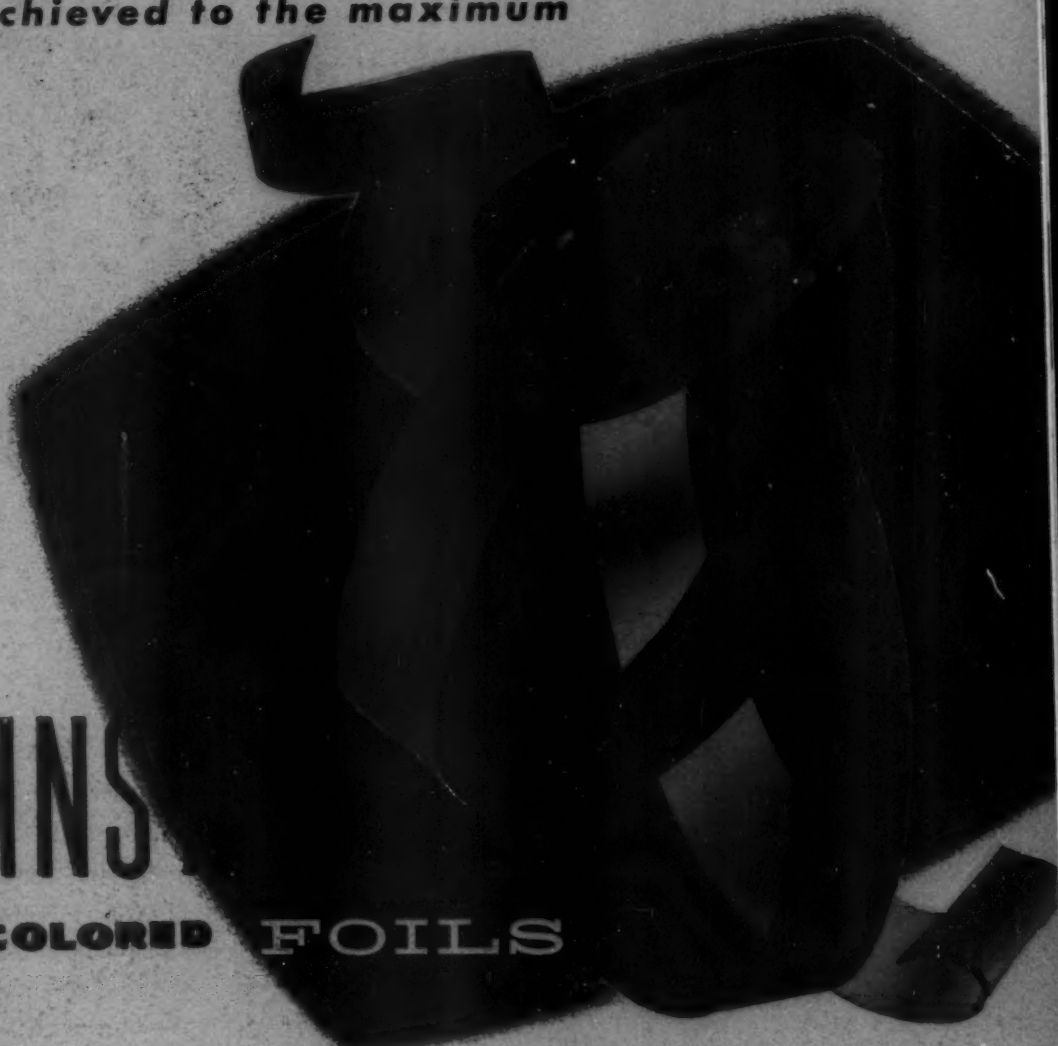
Their fast, accurate feeds, for example, give you the speed you need. The counterbalanced slides... counterbalanced cranks... fast, smooth clutches—all these assure you of close-tolerance blanking, forming and scroll-cutting **for every run**. What's more, long gibbed slides and guides protect your dies.

You get long service, too, because of their rugged design. The massive bases are heavy; the frames are solid and rigid; both are cast of sound-deadening Meehanite. Thus you get the smooth, accurate scroll-cutting and the precise blanking and forming that increase die life. In short, the accuracy's built in and it stays in **year after year**.

When so much depends on uniform closures, it makes sense to depend on Bliss. To get more information on Bliss' high-speed scroll shear and strip feed press, write for Sections 1 and 2, Catalog 36-B.

THE DYNAMICS OF COLOR

...achieved to the maximum



JOHNSTON COLORED FOILS

24 DAZZLING TINTS
FROM WHICH TO CHOOSE
SHINY or MATT FINISH
PLAIN or EMBOSSED
in ROLLS or SHEETS

What are YOUR Needs?

SINCE 1879

JOHNSTON FOIL MANUFACTURING CO.

6008-6298 S. BROADWAY
ST. LOUIS 11, MISSOURI

SALES
OFFICES

608 SOUTH DEARBORN
34 EXCHANGE PLACE
633 SOUTH LA BREA AVE
7446 VINE STREET
5415 WESTMINSTER
6008-6298 S. BROADWAY

CHICAGO, ILL.
JERSEY CITY, N. J.
LOS ANGELES, CAL.
CINCINNATI, O.
DALLAS, TEXAS
ST. LOUIS, MO.

CO 495
LC 4790-D
LA 1835-D
CF 225
SL 309
TELETYPE
WRITER
NUMBERS

RI

let RHEEM

RIGID BARRIER* PACKAGING

reduce your shipping,
packaging and handling costs
...and keep your product safe

Rheem's complete and specialized Rigid Barrier Packaging Department is staffed with creative and expert packaging engineers. They have had many years of experience in designing all types of hermetically sealed containers for all kinds of products, as well as in selecting the best dunnage material for shock and vibration isolation. And these men, who are equipped to take over all or part of *your* packaging program, are proving that Rheem Rigid Barrier Containers are the safest, and most economic way to ship even the most intricate and delicate products.

Rheem's vast facilities are also utilized in producing Rigid Barrier "AN" Containers under military specification MIL-C-6054, meeting the requirements of MIL-P-116B specifications. "AN" Containers are available in a range from 1½ to 55 gallons, including multiple lengths and capacities. In other words, Rheem can solve any packaging problem from small engine parts to complicated electronic gear.

Rheem also has a complete line of light gauge Rigid Barrier Containers for industrial use—electronic tubes, automotive and diesel parts, precision instruments, or any other product requiring special packaging protection. And for pennies extra, Rheem will lithograph a container with your trademark, or design, and in any number of colors.

Whatever your product, chances are that Rheem engineers have already found a way (or can quickly find one) to package it safely in steel. And probably more economically than before, whether the container is for re-use or one-time shipment. Why not write today for details!

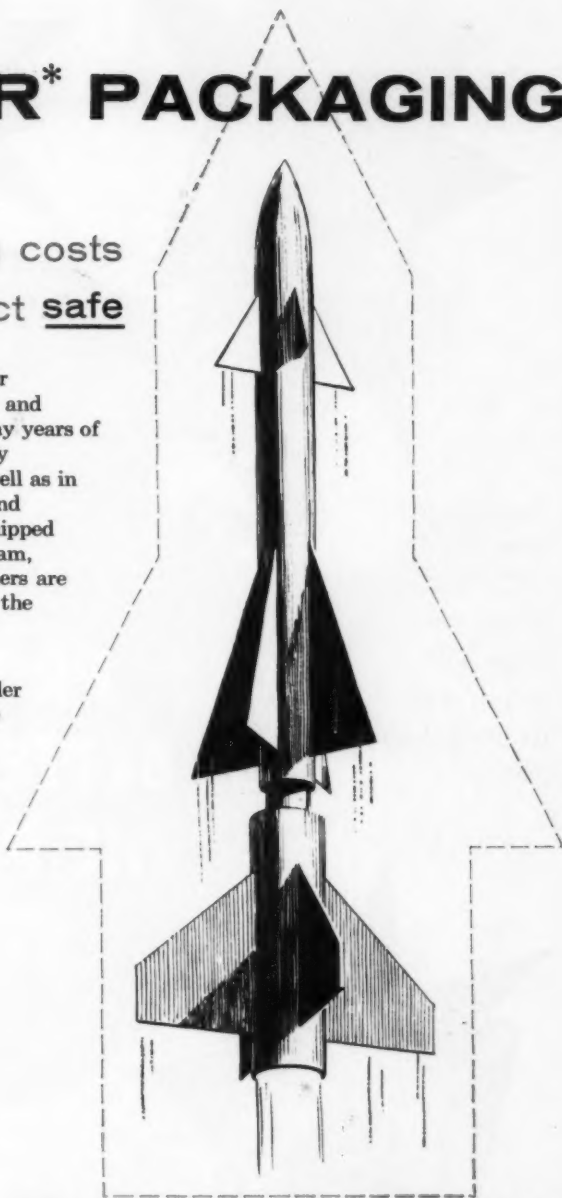
*Trade-Mark of Rheem Manufacturing Co.

YOU CAN RELY ON



WORLD'S LARGEST MANUFACTURER OF STEEL SHIPPING CONTAINERS

RICHMOND AND SOUTH GATE, CALIF., HOUSTON, CHICAGO, NEW YORK,
NEW ORLEANS, LINDEN, N.J. AND SPARROWS POINT, MD.



Rheem designs and produces Rigid Barrier Containers for Guided Missiles, Electronic Tubes, Telephone Equipment, Precision Instruments, Aircraft Engines, Torpedoes, Auto and Diesel Parts, and other hard-to-ship products.

RHEEM MANUFACTURING COMPANY — RIGID BARRIER PACKAGING DEPARTMENT
1701 W. Edgar Road, Linden, New Jersey

Please send me information on the RIGID BARRIER

PACKAGING OF _____
NAME _____
POSITION _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____

MP-8



Just visualize
how our
*POLYTHON
Bags printed or
plain will
sell as well
as protect your
goods



**NOTHING
SELLS
YOUR
PRODUCT
BETTER THAN
THE PRODUCT
ITSELF**



Experience
Tells The Tale

Outstanding

*POLYTHON packages

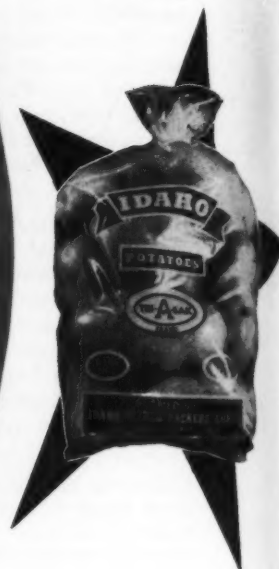
by POLY PLASTIC

PRODUCTS, INC.

have made merchandising

history for an amazing

range of items



OUR COMPLETE
SERVICE INCLUDES

- DESIGN
 - EXTRUSION
 - PRINTING
 - CONVERSION
TO BAGS
- ALL UNDER
ONE ROOF**

*Brand of
Polyethylene

POLY PLASTIC

Extruders · Printers · Converters



PRODUCTS, INC.

NUMBER *Two* FOURTH AVENUE
PATERSON 4, NEW JERSEY



Pull up a couch . . .

and tell us your Food Packaging Problems

We're finding a cure for lots of packaging problems these days where bleached food board is involved. It's not that we're so smart — we still have lots to learn about the amazing versatility of our new cylinder board production equipment.

But the fact is that our theory of combining short fibre hardwoods with long fibre pulps is working out to produce some truly unique benefits for established users of food boards.

This new mill has been in production only a few months. Now is the time to get in on the ground floor with your specifications for a board that can be high speed multi-color printed, that will fold and score easily and that will be rugged enough for *your* needs.

At this stage we promise nothing but our undivided attention to your story. If we can come up with what you want, this independent mill is in an ideal position to promise regular on schedule delivery of board under all market conditions.

We're listening.

GENERAL SALES OFFICE
CROSSETT, ARKANSAS

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J. W. Taylor
414 St. Paul St.

DALLAS OFFICE
H. E. Manner
3409 Oaklawn Ave.

CHICAGO OFFICE
L. J. Walker, W. V. Williams
D. W. Schwiier
300 West Washington

CINCINNATI OFFICE
R. J. Lantry, J. T. Allen
1816 First National Bank Bldg.

CROSSETT

A Division of the

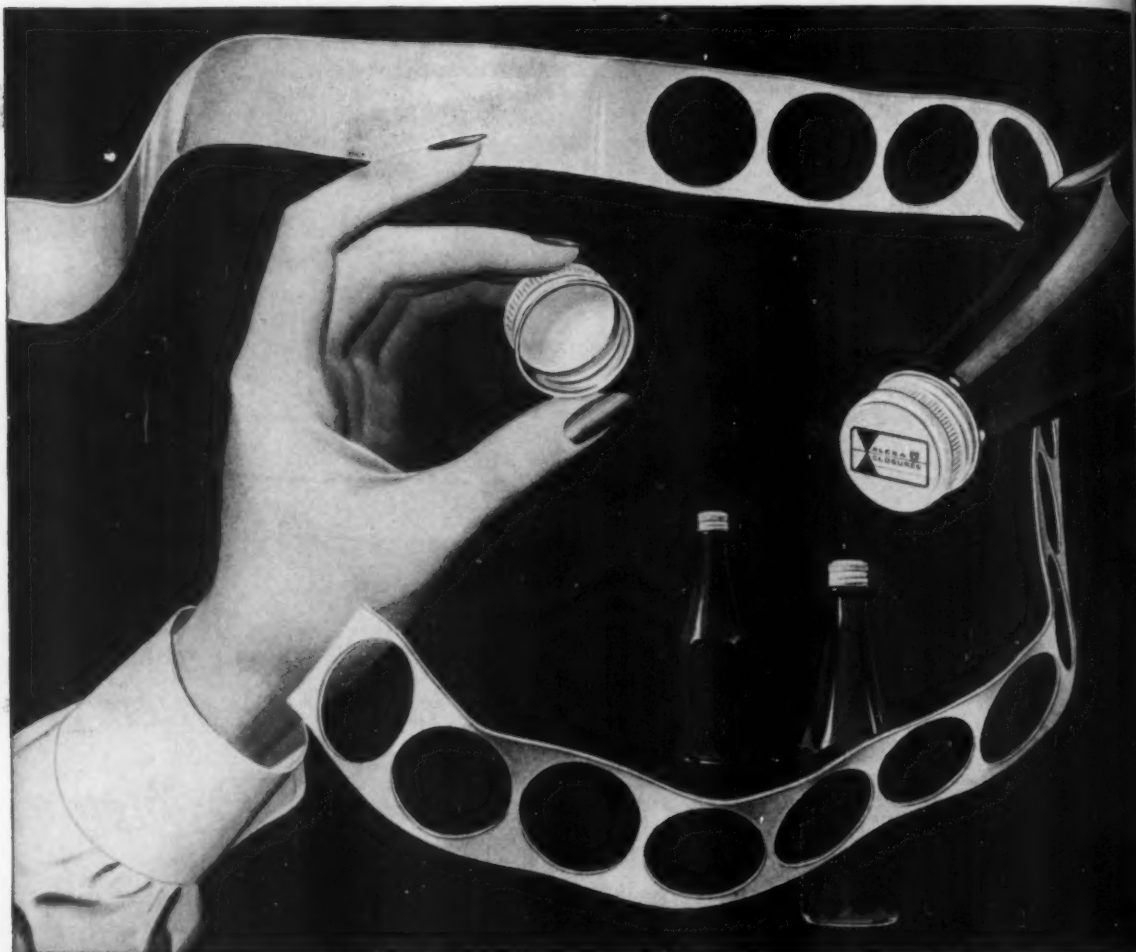


PAPER MILLS

Crossett Co., Crossett, Arkansas

Another new development using

B.F. Goodrich Chemical *raw materials*



Geon liner provides a new twist in bottle closures

SO popular is Alcoa's new HyTop closure that nearly all major brands of catsup today wear this new cap.

Now these bottles are easy to open. The white, clean-looking liner inside the closure, made of Geon polyvinyl materials, is exceptionally smooth. So a dainty twist removes the cap.

Geon is a remarkable plastic raw

material supplied in a wide range of types and formulations to suit specific applications like this. Geon is functional for closures, beautiful for wall coverings, soft and pliable for upholstery, rigid and strong for pipe. Where can you use a material like this for better performance and sales appeal?

For complete information write Dept. DQ-4, B. F. Goodrich Chemical

Company, Rose Building, Cleveland 15, Ohio. Cable address: Goodchemco. In Canada: Kitchener, Ont.



GEON polyvinyl materials • HYCAR American rubber and latex • GOOD-RITE chemicals and plasticizers • HARMON colors



Ribfoil Cups^{T. M.}

**...THE NEWEST DEVELOPMENT IN
ALUMINUM FOIL PACKAGING**

ANOTHER FIRST BY BASCA

Design, Mechanical and Process Patents Applied For

BASCA MANUFACTURING COMPANY (Division of Maytag's) 2223 North Olney St., Indianapolis 16, Indiana



**Send coupon TODAY
FOR SAMPLES of...**

Ribfoil Cups T. M.

**...the new colorful aluminum
foil package that's been
proven 15 million times!**

PRODUCT INFORMATION ABOUT RIBFOIL CUPS

1. **Sizes:** Now available in 4, 12 and 16 oz. sizes. Intermediate sizes available soon.
2. **Colors:** Seven sparkling colors.
3. **Closures:** Three types; (1) disc closure foil laminated on underside; (2) clear plastic window lid; (3) all-aluminum cover cap imprinted in 1 or 2 colors. Mix or match cover cap with Ribfoil Cup color.
4. **Filling:** Can be filled by hand, semi-automatic or fully automatic equipment. No major modifications necessary. Filling and capping equipment available (see photograph below).
5. **Hermetic Sealing** optional.
6. **Vinyl coating** optional.

Proved in Production

15 million Ribfoil Cups have been filled and capped on modern high-speed production lines.

Proved in Transit

15 million Ribfoil Cups have been shipped from coast-to-coast and border to border.

Proved in Retail Selling

15 million housewives have seen and bought products packaged in colorful Ribfoil Cups.

Send for Samples of Ribfoil Cups Today!



BASCA MANUFACTURING COMPANY
2222 North Olney Street, Indianapolis, Indiana

Gentlemen: Rush me full information and samples of Ribfoil Aluminum Cups today.

Our company packages _____

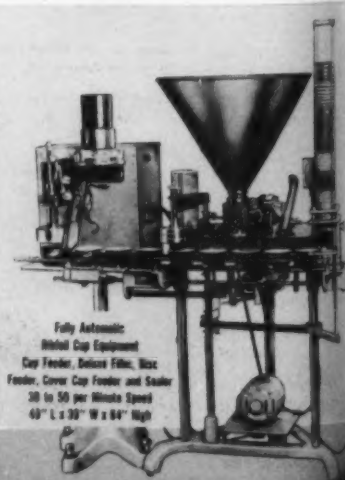
Check here for information on filling and sealing methods and machinery ().

Name _____

Company _____

Address _____

City _____ State _____



Fully Automatic
Ribfoil Cup Equipment
Cup Feeder, Disc Filter, No. 2
Feeder, Cover Cap Feeder and Sealer
30 to 50 per Minute Speed
40" L x 30" W x 64" High

Economical semi-automatic labeling for short runs and frequent job changes

PONY LABELRITE*

Exclusive vacuum principle delivers fast, precision labeling. Uniform label pick-up, precise label placement, complete elimination of excess glue.

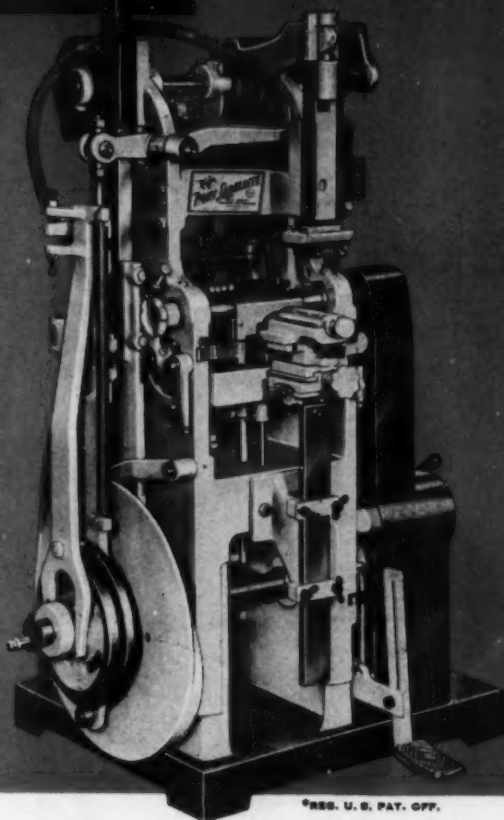
Applies labels to recessed, paneled, convex or concave surfaces. Handles foil, varnished or embossed labels. Can be used with nearly all types of products or containers.

Simple, low-cost change parts; 15 minute change-over. Ask for details, proof, demonstration.

Up to 60 LABELS
PER MINUTE

Adds tremendous versatility to your packaging operation.

- Handles more types of labeling.
- Mechanizes more kinds of jobs.
- Works with a wider range of labels, products, packages.



See how many applications you have for this money-saving, many-purpose machine

- Bottles • Jars • Boxes
- Ampules • Seals
- Hinge applying to paper boxes
- Wrap-around labeling
- Three-panel labeling
- Calendar flip-ons
- Photo-mounts
- Jugs • Cans • Books
- Roll Labels • Books
- Insertion of literature
- Greeting Card underlays
- Assembly of small boxes
- Counter Displays
- Address labeling

(This list suggests typical Labelrite uses. It is not complete.)

*REG. U. S. PAT. OFF.

OPERATING ADVANTAGES

ADAPTABILITY. Fits any standard production line.

SPEED. Smaller work often permits two-at-a-time feeding.

PERFECT REGISTER. Positive delivery of label from hopper to container.

POSITIVE GLUE CONTROL. Twin rollers for uniform glue distribution.

OVER-ALL OR STENCIL GLUING. Over-all gluing standard; strip or pattern when desired.

LOW OPERATING COST. No inspection and wiping, faster feeding without fatigue.

QUICK CHANGE-OVER. Operator can easily make her own change-over.

SELF-CLEANING FEATURE. Quick, simple; takes less time from productive hours.

VERSATILE. Works with amazing variety of sizes, shapes, materials, objects.

PREVENTS EXCESSIVE ADHESIVE. Positive control of glue film, no wiping of containers.

NEW JERSEY MACHINE CORPORATION



AUTOMATIC LABELING

PACKAGING • PAPER BOX MACHINERY • MAKERS OF THE PONY LABELRITE

FACTORY SALES AND SERVICE BRANCHES:
CHICAGO, CINCINNATI, LOS ANGELES

GENERAL OFFICES AND PLANT: 1500 WILLOW AVENUE, HOBOKEN, N. J.



Finest

from every angle

Round and square face powder boxes

Dusting powder boxes in three diameters

Talcum powder boxes

Guest soap and sachet set-up boxes



Manufacturers of Fine Paper Boxes

E. N. Rowell Co. Inc.

BATAVIA, NEW YORK

TYPICAL INSTALLATIONS

PRUNES



FROZEN VEGETABLES



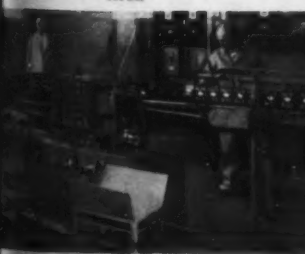
RAISINS



SPAGHETTI DINNER



RICE



FROZEN FRUIT



...and other applications

Mail coupon today
for complete information

FOOD MACHINERY AND CHEMICAL CORPORATION

P.O. Box 1120, San Jose, Calif. 95128
103 E. Maple St., Hoopston, Ill.

527-12

Please send me more information on the "Sure-Way" Package Caser:

Name _____ Position _____
Company _____
Address _____
City _____ Zone _____ State _____
Product (s) _____

It's Here!

Biggest advance in continuous, high-speed automatic casing

SURE-WAY PACKAGE CASER

...an entirely new concept of automation
applied to packaged product casing

Tried—Tested—Proved—The "Sure-Way" Package Caser has fast become first choice wherever low-cost, automatic, high-speed casing is required. It passes every test for performance and versatility with its gentle, near-human handling of scores of package types and sizes. On frozen foods, cake mixes, rice, sugar, beans, cereals, oleomargarine, bar soap, powdered soaps and detergents, cosmetics, small packaged machine parts—on virtually any product packaged in a rigid or semi-rigid container, or product that takes a rigid shape—the "Sure-Way" leads the casing field! Speeds up to 240 packages per minute in continuous operation with only one operator! Change parts available to accommodate a variety of package sizes and casing patterns within certain ranges. Send the coupon for all the facts.

The versatile, low-cost "Sure-Way" cases a wide variety of package weights, sizes and arrangements.



Exclusive Distributors:

FOOD MACHINERY AND CHEMICAL CORPORATION

Canning Machinery Division

General Sales Offices:

WESTERN: SAN JOSE, CALIF. • EASTERN: HOOPSTON, ILL.



Now! A Foil Kraft



container with a "POP OUT" TOP

*new easy-open, easy-close foil container pleases housewives
... makes your products easier to sell*

Housewives will love this exclusive new Foil Kraft container. Because it's made of foil, it protects food as no other packaging material can. It blocks out light rays, keeps out air, preserves original freshness and flavor.

Yet it opens easily with the flip of a finger—requires no crimping. Pop the top off and you have an attractive tray that's easy to serve from. Pop the top back on, and you have a spill-proof container. No fuss, no wasted food. It's perfect for baked goods, all types of frozen foods.

Attractive tops for these new containers can be designed to your specifications... in foil with your product story in four-color printing, or with a combination of foil and a transparent window that displays the contents to full advantage.

Take advantage of this exclusive new container soon. It will make your product more attractive, easier to serve, *more salable*.

You are not limited to standard sizes or shapes! Our design staff will be happy to work with you to

develop containers in shapes and sizes to suit your products. Packaging machines are available to meet your requirements.

At Foil Kraft the emphasis is on service. We can offer you a complete line of foil containers to make your products more attractive, more convenient. Whatever your packaging problems, let Foil Kraft help you select a container that will save you money—help you increase sales. For details write or call:

Kaiser Aluminum

FOIL KRAFT DIVISION

1345 SOUTH HERBERT AVENUE, LOS ANGELES 23, CALIFORNIA
TELEPHONE ANGELES 9-0491

P.O. BOX 323, WANATAH, IND., TELEPHONE 1-2515

GENERAL OFFICES, 1924 BROADWAY, OAKLAND 12, CALIFORNIA
TELEPHONE TWINOAKS 3-4600

See "THE KAISER ALUMINUM HOUR" Alternate Tuesdays NBC Network. Consult your local TV listing.



Transparent "see through" top shows contents to full advantage.



Foil top tells product story in beautiful four color printing.

10 reasons why **NRM** *thermoplastic* EXTRUDERS are "first choice" among plastics manufacturers and processors **THE WORLD OVER...**

- 1 "BALANCED HEAT CONTROL"
- 2 "CAST-IN" CYLINDER HEATING
- 3 "QUICK-OPENING" DIE GATES
- 4 ONE-PIECE 20:1 L/D RATIO CYLINDERS
- 5 SINGLE WALL ALLOY-LINED CYLINDERS
- 6 CONTROL CABINETS MEETING J.I.C. CODES*
- 7 RUGGED CONSTRUCTION THROUGHOUT
- 8 A COMPLETE LINE OF EXTRUDERS (UP TO 12")
- 9 MATCHED ACCESSORIES
- 10 FEED SCREWS FOR EVERY EXTRUSION NEED

*Joint Industrial Council

Make NRM Thermoplastic Extruders and accessory Equipment your first choice, too, and *profit* by these 10, and many other design and operating advantages. Whether you manufacture plastics, or process them for packaging and fabricating, you can do it more efficiently and economically with NRM Extruders and matched accessories. Write TODAY for details and data on the NRM *full* line of Thermoplastic Extruders and Equipment.

2587-1

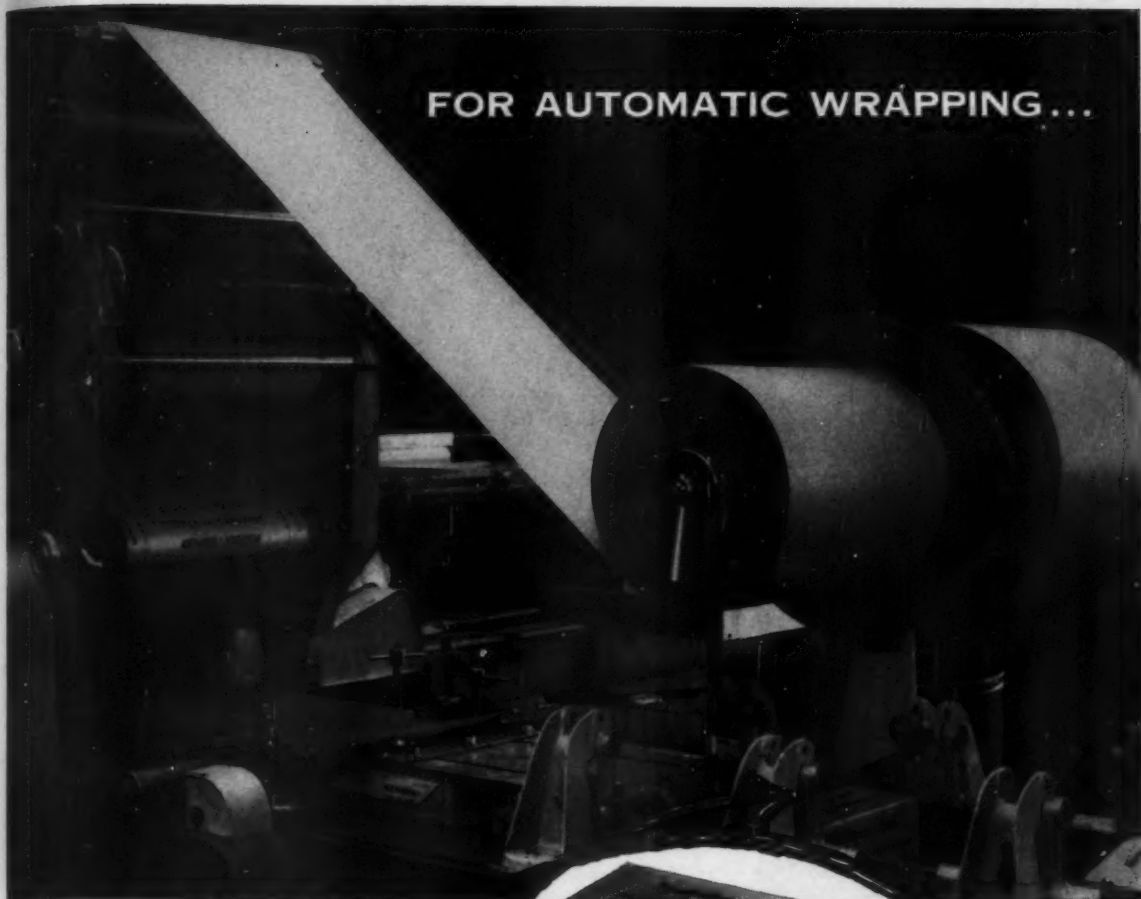
NATIONAL RUBBER MACHINERY COMPANY

NRM

General Offices and Engineering Laboratories: 47 West Exchange St., Akron 8, Ohio
EASTERN PLANT: 384 Getty Ave., Clifton, N. J.
SOUTH: The Robertson Company, Rutland Building, Decatur, Ga.
WEST: S. M. Kipp, Box 441, Pasadena 18, Cal.
MID-WEST: National Rubber Machinery Company, 5875 N. Lincoln Ave., Chicago 45, Ill.
CANADIAN: F. F. Barber Machinery, Ltd., 187 Fleet St., West, Toronto, Ont.
EXPORT: Omni Products Corporation, 460 Fourth Ave., New York, N. Y.

Creative Engineering

FOR AUTOMATIC WRAPPING...



Machine by Scandia



MENNEN USES INTERNATIONAL GATOR-HIDE

World's most widely used wrapping paper. Gator-Hide is rugged, tough. Especially built to take all automatic wrapping operations. Quality Controlled from forest to finished product.

If you have a problem in automatic wrapping, see International.



"wraps
a world of
products"

International Paper COMPANY
SOUTHERN KRAFT DIVISION
220 East 42nd Street, New York 17, N.Y.

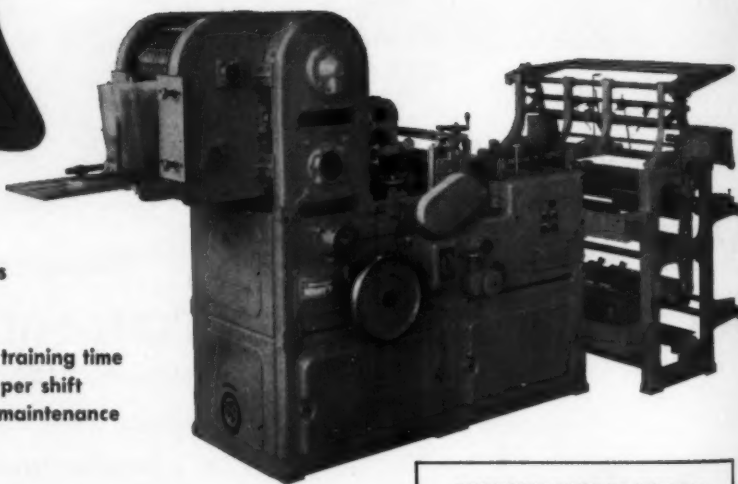
HERE'S THE BEST CELLO BAG you can make *at Lowest Cost*

STRONG,
sift-tight
HEAT & GLUE SEAL
with
NON-BLOCKING
BOTTOM



HI-SPEED, LOW COST PRODUCTION

- Quick change-over for short runs
- Inexpensive change-over parts
- Low initial investment
- Simple to operate with minimum training time
- Production up to 120,000 bags per shift
- Simple rugged design with low maintenance



VERSATILE, PROVEN PERFORMANCE

The Simplex "300" delivers 175 to 300 quality bags per minute. Will produce flat or gusset bags—single or double wall with infinite adjustment of bag lengths from 4" to 18", and from 2" to 12" in width. Send for sample of Simplex "300" sift-tight bag today for your own inspection.

SIMPLEX MODEL "300"
CELLO BAG MACHINE
—also handles K-202

Simplex

SIMPLEX PACKAGING MACHINERY DIVISION

FOOD MACHINERY AND CHEMICAL CORPORATION

534 - 23rd AVENUE, OAKLAND 6, CALIFORNIA

Foreign Sales: FMC Export Dept., P. O. Box 760, San Jose 6, Calif. (Cable Address: FOODMACHIN)



REPRESENTATIVES IN ALL PRINCIPAL CITIES

Create Desire



and make the *Sale* with

Colorcast[®]

DRUM FINISHED

L A B E L



MADE ONLY BY THE CHAMPION PAPER AND FIBRE COMPANY • HAMILTON • OHIO



Create Desire for YOUR product through attractive packaging with

Colorcast[®]

**DRUM FINISHED
L A B E L**

What better means of introducing your product to new friends, or keeping it in modern focus with long established ones, than the appealing high gloss surface and brilliant, light-resistant colors of Colorcast Drum Finished Labels.

Use Colorcast brand to dress up your product for today's challenge of modern selling methods *and* product identification.

*Samples of label, box wrap, and gift wrap grades available
on request to our Advertising Department.*



THE CHAMPION PAPER AND FIBRE COMPANY

General Office: HAMILTON, OHIO

FORMVAC

Complete "Rollform" Ensemble:

NOT A HAND touches the new Formvac "Rollform" ensemble as it feeds, vacuum forms, and takes off finished products in cycles as fast as 200 per hour! *It feeds, clamps, heats! It forms, cools, strips! It takes up and cuts off!* The ingenious craftsmanship of the Swiss is responsible for this fully coordinated equipment: made to precision standards, designed to combine the utmost in safety and speed with ease of operation and high quality production. Molding area: 24 x 36 inches.



FORMVAC G1
WITH
"ROLLFORM"
UNITS

**Buy With Confidence... Backed by America's
Most Dependable Experience in Engineering and Manufacturing
High Quality Plastics Processing Equipment!**

**WELDING ENGINEERS, INC.
INVITES YOU TO SEE THE
ADVANCED FORMVAC
VACUUM FORMING EQUIP-
MENT IN ACTION.**

For further information, demonstration appointments, sales or engineering service for United States and Canada: write **FORMVAC CORPORATION** (a division of Welding Engineers, Inc.) 601 West 26th Street, New York 1, N. Y. Telephone WAtkins 4-0014. Cable address Formvacor, New York. West Coast Representatives (California, Arizona, Nevada): **MACHINERY SALES CO.**, 2838 Leonis Boulevard, Los Angeles 58, California, Telephone LUDlow 8-8111.



Gravure Printing on Ridgelo

**The Impressions are Better Two Ways...
On the Cartons and On the Customers!**



Write for Free Samples

#90 ULTRAGLOSS
(glazed)

#75 BRUSH FINISH
CUSTOM COATED

STANDARD COATED
(machine)

METALLIC COATED

POLYETHYLENE COATED

Great flexibility, high quality, and tremendous production capacity have pushed gravure to the top among folding carton printing processes. Keeping step with gravure's giant strides, the Ridgelo line of custom, special, and machine coated boxboards has numerous features particularly suited to this process.

Uniformity is the features' keynote. Uniformity of finish, roll make-up, caliper, cleanness and brightness. Color, absorbency, delivery schedules and other requirements are met to exact specifications. And the fact that Ridgelo is the product of an independent mill, catering to independent converters, is a big plus in assuring loyal, non-competitive interest and service.

LOWE PAPER COMPANY • Ridgefield, N. J.

An Independent Mill — Serving Industry Since 1906

Representatives: Detroit—Joseph P. Giroux • Los Angeles—Norman A. Bulst • Philadelphia—Philip Rudolph & Son, Inc. • St. Louis—A. E. Kellogg

Durethene does double-duty in textile packaging... locks delicate "woman-appeal" printing to film surface—gives tear-proof protection to weighty products...

Polyethylene Film—virtually the perfect all-around textile packaging medium—solves the old problem of allowing shoppers to see the goods, yet protecting against soil and damage regardless of how much the package is handled.

DURETHENE Polyethylene Film gives extra sales appeal combined with even better protection. You see, DURETHENE's *Permatreated* Ion-Film permits the most delicate printing—or the most vivid—without concern for rubbing, flaking or other damage during counter life. At the same time, it can handle the most taxing assignments—hold heavy, bulky sheets or blankets (as well as baby garments, wash cloths, sweaters and fine textiles of all kinds) without splitting or breaking, because DURETHENE Film is the strongest you can get. And DURETHENE Treated Film is supplied in either sheet or tube form.

DURETHENE's main plant is the largest, most modern in the world devoted exclusively to Polyethylene Film production, incorporating every latest method of manufacture and quality control to assure gauge accuracy, high transparency, and other important features. Don't settle for just any Film—be sure your Converter makes your bags or wraps from DURETHENE Film, and stop packaging headaches before they start.

whatever you wrap or bag,
you'll do it better with

Durethene THE POLYETHYLENE FILM
WITH THE "DOUBLE-PLUS" QUALITY...
available in bags and sheets from leading Converters everywhere



Durethene



DURETHENE KOPPERS COMPANY, INC.
7003 WEST 60th STREET, CHICAGO 50, ILL.

☐ Please send us samples of Durethene HIGH GLOSS, HIGH CLARITY, Polyethylene Film Bags for test. Our Package dimensions:

SIGNED _____
COMPANY _____
ST. & NO. _____
CITY _____ ZONE _____ STATE _____



How Famous Brands Prove . . .

More Sales Power Per Package . .



Remember, Waxed Glassine is more than a wrapper. It billboards your brand, merchandises itself, sells itself. Waxed Glassine is an advertisement with genuine appetite appeal. In fact, *it's an appetizement!*





...with WAXED GLASSINE

*Modern packaging, distinctive design, superior protection at minimum cost!
Waxed Glassine sparks instant brand recognition, inspires consumer confidence in product freshness and quality!*

THE POWER OF WAXED GLASSINE OUTER WRAPS:*

- **More eye appeal** Sparkling clean surface provides perfect background for brilliant, contrasting colors, makes the most of appetizing illustrations, lets you use entire package for powerful all-over sales-winning designs that prompt purchase by brand! Waxed Glassine comes in many weights, many colors—one just right for the job in mind!
- **Billboards your brand** Every package is a *billboard* in the store and in the home, generating impulse sales and assuring repeat customers with its fresh, inviting look, strong appetite appeal, stand-out brand identification and proven selling features!

INNER AND OUTER WRAPS OF WAXED GLASSINE:

- **Extra flavor protection** Safely seals in all that desirable just-made goodness, keeps customers coming back for more. And satisfied shoppers mean satisfied retailers!
- **Extra freshness protection** Self-sealing Waxed Glassine protects against moisture invasion, maintains freshness and texture best for longer shelf and pantry life. Easier to open, easier to reclose, contents keep fresh and tasty for the life of the package!
- **Extra grease protection** Waxed Glassine wrappers resist penetration by fats, oils, shortenings. No more rancidity problems! Your package stays clean, inviting, colorful!
- **Extra strength** Waxed Glassine passes every rugged test of delivery, in-store and consumer handling! Made stronger to stack better, it cuts down crumbling, breakage, ripped wrappers and returns that shrink your profits!
- **Low cost** Lower basic costs plus constant, dependable supply team up with other Waxed Glassine advantages to produce a package that reaches out and sells! Results: increased net profits for you!



Waxed Glassine teams up with the experience, facilities and service of the nation's top converters, to give you modern packaging and production protection that pays off in bigger packaging business, and the job doesn't stop here!

Traffic-stopping designs, actual samples, proven sales ideas, complete cost sheets show how Waxed Glassine pays off in better packaging, bigger brand profits! See your Waxed Paper salesman, or write or telephone us direct.

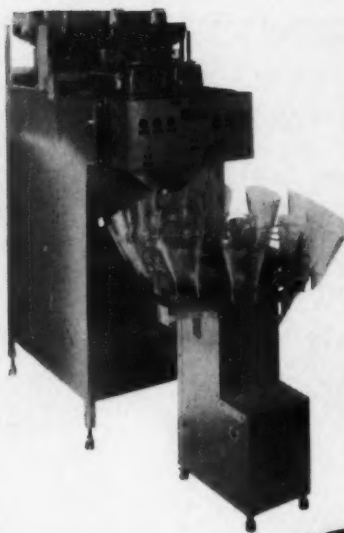


Waxed Paper Merchandising Council, Inc. • 38 South Dearborn Street • Chicago 3, Illinois • Telephone: STate 2-8115

Three reasons
why **WOODMAN** lets you

PACKAGE with PROFIT!

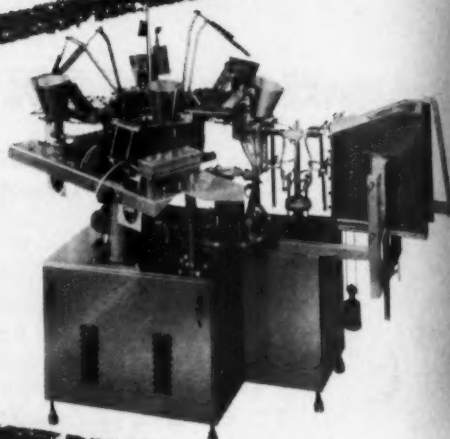
"Woodman-designed"—your assurance
of packaging machinery geared to the high-
speed production and low-cost
operation that means bigger profits for you!



WOODMAN'S PLUR-A-MATIC — So accurate, it eliminates the need for check-weighing each bag! Every second counts with this Woodman triumph. One to four scales keep production rolling at high speed. Weight range, two to sixteen ounces single shot. Quick, easy change-over of product, bag weight and size!

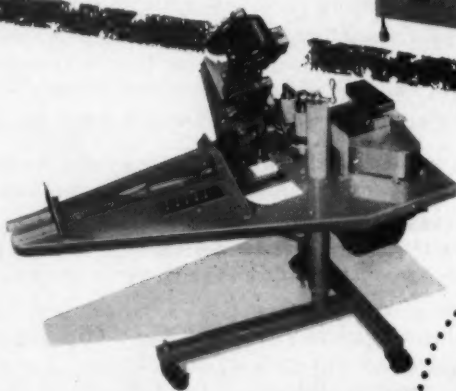
WOODMAN'S AIR-WEIGH-MATIC MODEL "56"

Practically operatorless, the Woodman Air-Weigh-Matic saves time, handling costs—reduces adjustments. Extensive use of positive cams makes precision functioning possible. New cam-operated heat sealer assures trouble-free sealing operation. New mounting facilities for stainless steel cylinders speed changeover time.



WOODMAN'S KLO-SEAL KLO-STITCH

"56"—This versatile machine includes models for straight heat sealing, straight stitching or a combination of the two—with or without pre-heaters. Flexible, compact, the "56" utilizes a silent chain drive for carrying bag. Code daters, hole punch, bag counter, etc., optional.



The
WOODMAN
Company

HOME OFFICE, DECATUR, GEORGIA

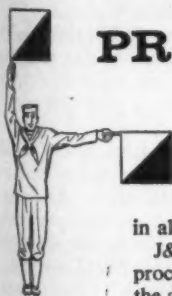


"See all three of these
**WOODMAN Profit-
Makers** in actual
operation at Booths 403
and 405 at the PMMI
Show. Your **WOODMAN**
MAN is a **GOOD MAN**
to know!"

Direct Sales & Service Offices in
Portland, Fort Worth, New York,
Boston, Columbus, Los Angeles,
Chicago, Kansas City, Detroit, San
Francisco, Philadelphia, Buffalo, St.
Louis, Montreal . . . soon in
Toronto, Canada.



PROTECTION is our business, too



Just as the "everyday" heroes of our nation's Coast Guard risk *their* lives to protect *our* lives—Jones & Laughlin Steel Containers protect your products by providing dependable packaging that assures safety in transportation and storage. Precise fabrication provides accuracy in all fittings and closures.

J&L drums and pails are chemically cleaned and dried by the JaLizing process. This assures a clean and dry, rust-inhibiting surface and increases the adherence and durability of decoration and interior lining.

Special protective interior linings are available to provide the best possible packaging for your products.

Jal-Coat, J&L's lithographing process, applies your trademark and sales message to the finished container . . . *no side seam touch-up is ever required.*

Plants located at Atlanta, Ga.; Bayonne, N. J.; Cleveland, Ohio; Kansas City, Kansas; Lancaster, Pa.; New Orleans, La.; Philadelphia, Pa.; Port Arthur, Texas; and Toledo, Ohio.



Jaliner, J&L's integral plastic contour liner, is designed to solve "hard-to-package" problems.

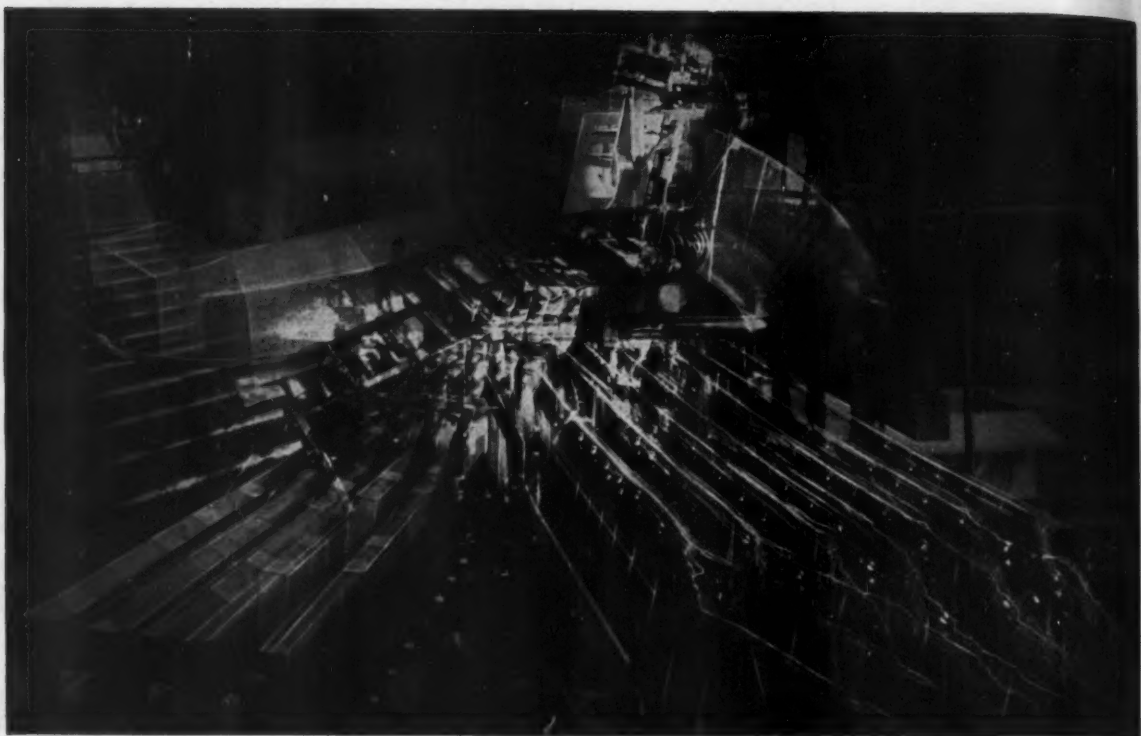


Jones & Laughlin

STEEL CORPORATION PITTSBURGH

CONTAINER DIVISION

405 LEXINGTON AVE., NEW YORK 17, N. Y.



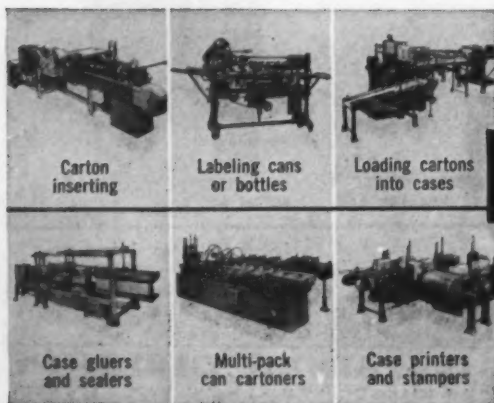
Packages in motion toward lower costs

ABOVE: Composite motion study of a Standard-Knapp Model 830 Bottle Packer and a Model 800 Carton Packer at work reducing costs of bottle and carton case loading.

On a Standard-Knapp 830 Bottle Packer, your containers move with quick precision into shipping cases. You are assured of a full load pattern every time. Steel fingers guide containers exactly into position. Each case is raised to receive the pack by means of a lift table which is cushioned as an assurance against damage to container or case.

The same smooth, constant-flow motion is obtained with Standard-Knapp Carton Packers. Each step in the packing operation is devised to combine maximum efficiency with gentle handling action. But that's not all — you can count upon continuity of operation.

Every motion of a Standard-Knapp machine is delivered by a mechanism ruggedly and precisely constructed to remain efficient under continuous 24-hour operation — dependability is inherent in S-K design, construction and performance. You take no chances with Standard-Knapp equipment. It steadily keeps your packaging costs moving downward. For more information about our Can, Bottle, Carton and Bag Packers and other packaging equipment, write Dept. G for our catalogs.



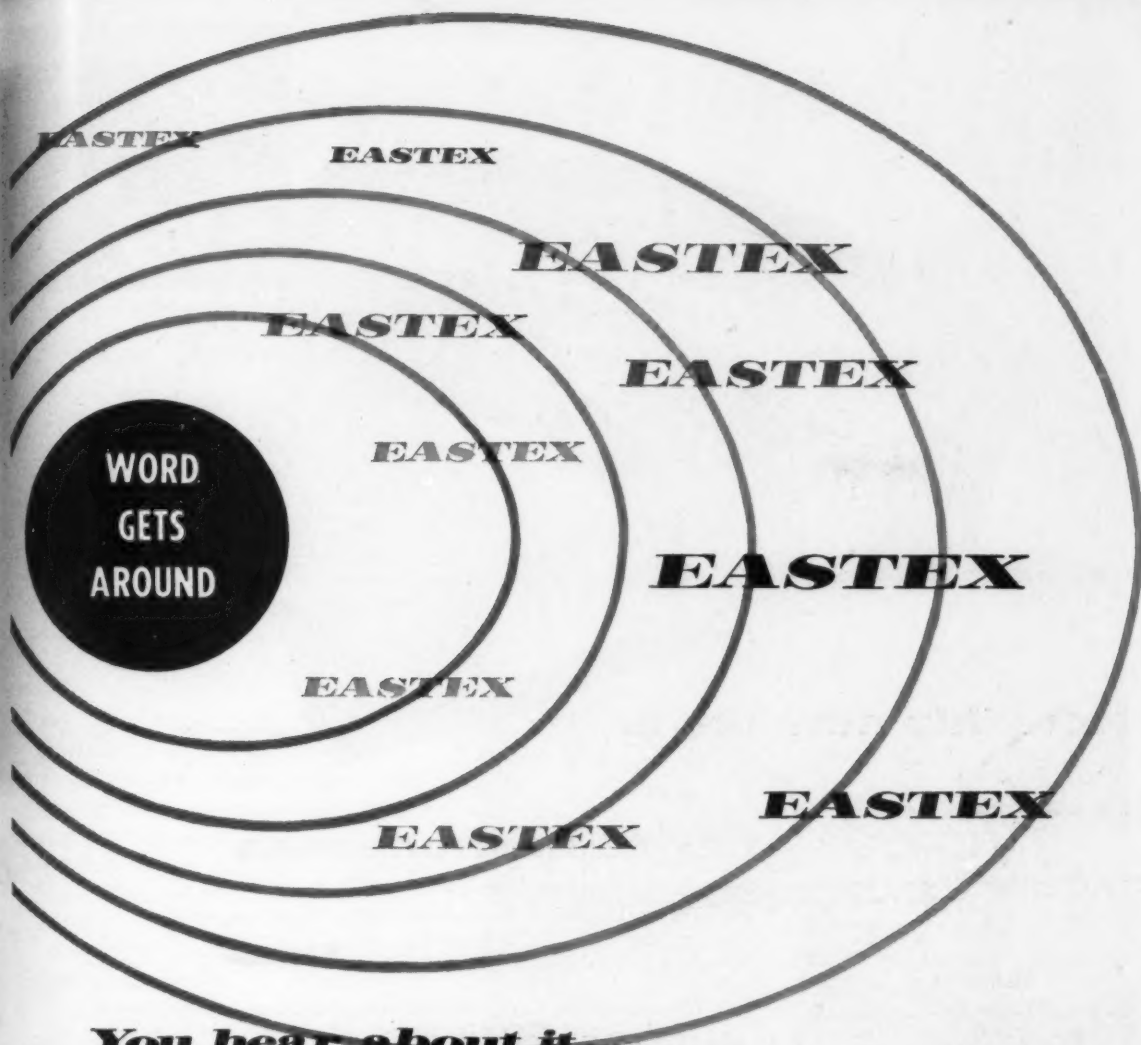
STANDARD-KNAPP

Visit us at booth 422
Packaging Machinery
& Materials Exposition
CLEVELAND SEPT. 11-14

DIVISION OF EMHART MFG. CO.

PORTLAND, CONNECTICUT

Latin American Representatives: American Steel Export Co., New York, N. Y.



You hear about it....

when a product, or group of products, meets and surpasses the highest standards of your trade.

Eastex pulp, board and paper have gained industry-wide acceptance . . . in record time. In the beginning, this young mill set its standards high to serve an industry which puts a premium on quality.

It's no wonder acceptance has been so universal. Eastex management and supervisory personnel were drawn from the nation's most experienced pulp and paper specialists. This leadership—coupled with the latest, most modern production facilities—has enabled East Texas Pulp & Paper Company to gain an enviable reputation with a superior product . . . second to none.

When quality is important, turn to:



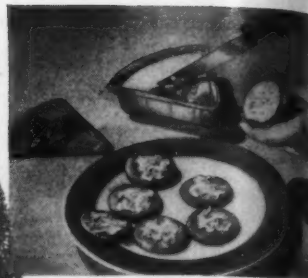
EAST TEXAS

Pulp and Paper Company

GENERAL SALES OFFICE
P. O. Box 816, Sibley, Texas
Telephone Evergreen 5-3711

EASTERN SALES OFFICE
122 East 42nd St., New York City, N. Y.
Telephone OXford 7-2990

WESTERN SALES OFFICE
1003 Builders Bldg., Chicago, Ill.
Telephone RAndolph 4-1068



How this new angle

Helps Sell **2 new cheeses**



The new angle of this wedge-shaped package gave a leading food processor an unusual container that offered . . . *Immediate Consumer Acceptance • Better Product Protection • New Production Economies*

When this leading dairy products company introduced two new cheeses, it wanted to package them in a strikingly different container. Gleaming rigid aluminum foil offered proved-by-sales consumer acceptance, plus maximum product protection. But no one had made a wedge-shaped rigid foil container. Forming the aluminum around the sharp 60° angle had been considered impractical.

Ekco-Alcoa Containers' engineers solved the problem with a radically different die design, and produced a container that offered the processing company the ideal solution to its problem.

Sales of the two new cheeses soared. The new container simplifies production and handling. It stacks easily and readily, withstands rough handling, provides longer shelf life, and protects the product from production to consumer. And it's perfectly adapted to fully automatic closure equipment, speeding production and lowering cost.

To get more in production advantages and saleability—call Ekco-Alcoa Containers Inc. for packaging. Choose from the largest line of stock rigid aluminum foil containers or have a package engineered to fit your particular needs.

The Plus Container



trademark

EKCO-ALCOA CONTAINERS Inc.

Wheeling, Illinois

EKCO is the registered trademark of Ekco Products Company. ALCOA is the registered trademark of Aluminum Company of America. The corporate name and combination mark, EKCO-ALCOA, is used under license to the manufacturer by each of these companies.

Better, Faster Gluing with

THERMOGRIP

**The Revolutionary
New Adhesive
In Coil Form**

THERMOGRIP is a new, 100% solid thermoplastic adhesive. It can be used on polyethylene films and coatings, aluminum foil, wet strength Kraft, chipboard, and many other packaging materials. It is odorless and tasteless and is being used for bonding food packages.



Speeds Production

This rope-like adhesive can be applied at your machine's highest speed and sets instantly. It is continuously fed and melted just before application. This avoids adhesive breakdown, charring, vaporizing — permits adhesive formulations to meet tough bonding problems.

With THERMOGRIP you get other advantages too. No glue preparation. Clean up and supervision at a minimum. Easier handling and other economies. Most of the problems involved with conventional gluing systems are avoided.

Inquire Now

Write us about your particular application. We will be pleased to send you more information on how THERMOGRIP adhesives and applicators can solve gluing problems in your plant.



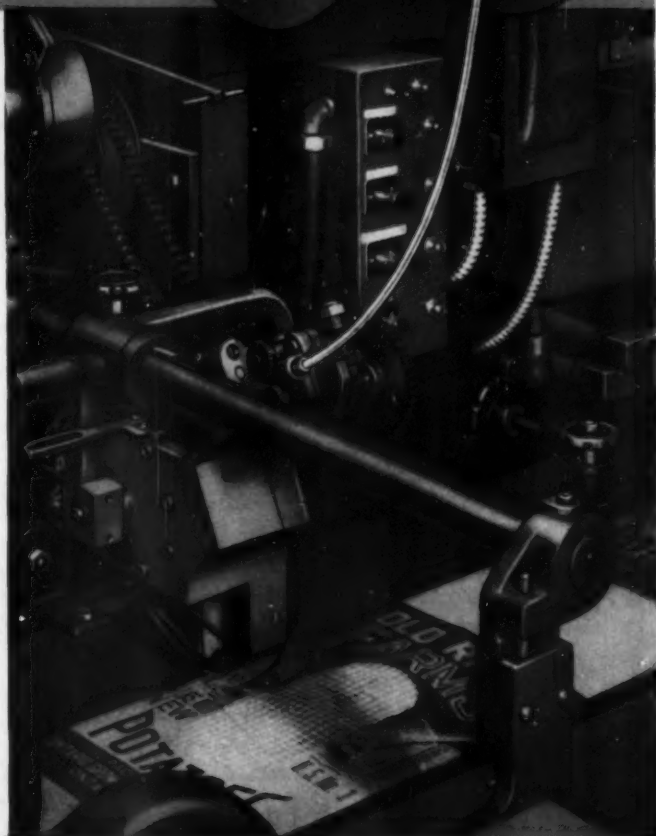
SEE THERMOGRIP AT BOOTH 555
Packaging Machinery & Materials
Exposition in Cleveland

INDUSTRIAL SALES DIVISION

United

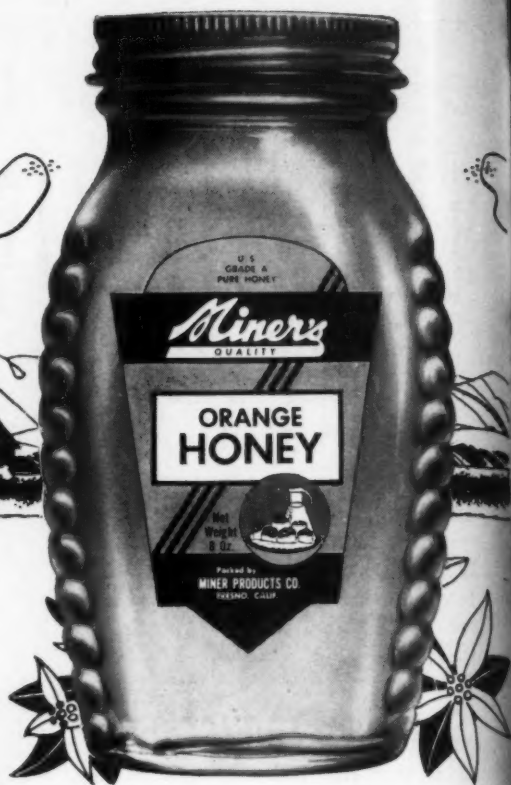
SHOE MACHINERY CORPORATION

140 FEDERAL STREET, BOSTON, MASSACHUSETTS



More output per hour, less stock spoilage, more uniform glue line, immediate handling on next operation — these are but a few of the many benefits resulting from the use of THERMOGRIP.

Manufactured by BB Chemical Company, subsidiary.



A Honey of a Business!



Back in 1924, the Miner family of Fresno kept 1,200 hives of bees. Each summer the boys gathered the honey, which was the major source of the family livelihood. The local grocer was their only customer.

These summer vacation chores of three young California brothers have grown into a leading packer, and local and international distributor, of California honey — the Miner Products Company of Fresno.

Today, a sales force of five covers the ever-expanding sales territory which extends throughout the San Joaquin Valley, from Bakersfield on the south, and north to Sacramento and San Francisco. Miner Honey is also exported to several European countries.

Miners no longer actually produce their own honey. Instead they concentrate on the processing and sales end of the business. Their honey now comes from 150 suppliers in the Fresno area.

In seeking still greater sales increases, Miners turned to Paramount Paper Products for packaging and label advice. Paramount experts designed an eye-catching label that has already helped boost the sales of this fine product.

You can capitalize on the experience of merchandising-minded label designers, too. Contact Paramount for complete information on a free label design service that will give your package more i-appeal®, more buy appeal.

For the right labels to do your job right, write to—

Paramount

i-APPEAL®

PARAMOUNT PAPER PRODUCTS CO.
4401 North 23rd Street Omaha 10, Nebr.
In Canada, 218 Front St. East, Toronto, Ontario

- PACKAGING ENGINEERS
- PRODUCTION MANAGERS
- SALES EXECUTIVES
- COST CONTROLLERS

JUST LOOK AT THIS
PRODUCT VARIETY
THAT IS PACKAGED ON THIS
Campbell WRAPPER
See These Amazing Machines Operate
Booth 109 PMMI Exposition—Cleveland
September 11-14, 1956

Speeds Production

wraps up to 300 units per minute!

Cuts Labor Costs

simplified one person operation!

Saves Materials

uses no boards or stiffeners — unless desired!

WRAPS PRODUCTS OF ALL SHAPES—Square, round, oval, oblong, flat or irregular . . . the Campbell Wrapper packages most any shaped product with equal ease and speed.

WRAPS WITHOUT BREAKAGE—Soft, crisp or hard, fragile or limber, the Campbell Wrapper packages without damage or breakage because it "float" wraps the material on your product.

WRAPS WITH ALL MATERIALS—Paper, cellophane, polyethylene, foils and all types of the new, modern plastic film packaging wraps which are so popular today.

POSITIVE WRAPPER SEALING—By gluing, crimping or heat sealing or any such combination with ends flared, turned under or diamond folded.

The Campbell Wrapper is now also available to provide positive **VACUUM** Wrapping with less than 2% package "leakers" guaranteed!

AUTOMATIC FEEDS—and deliveries provide continuous flow packaging with speeds geared to coincide with in-line production manufacture or separate operation. Write for complete details and send us a sample of your product.

Campbell
WRAPPER

PERSON SHARP MACHINE CO. • GREEN BAY, WIS.

Manufacturers of Aniline and Gravure Presses, Folders, Interfolders, Laminators, Waxers, Embossers, Slitters, Sheeters, Roll Winders, Packaging Machines, Creppers and Tissue Converting Units.

New York: 55 West 42nd Street



Write for full colored 16-page brochure telling all about the Campbell Wrappers and the many different types of products they package.

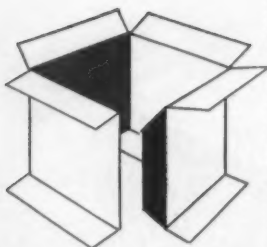




ANNOUNCING THE GRX SERIES

G—quick GRAB . . . **R**—water- and mold-RESISTANCE . . . **X**—EXPEDIENCY (speed with economy)

FAST-SETTING RESIN ADHESIVES



—for a **GLUE LAP BOX**—with joints stronger than the boxboard itself—a GRX Resin Emulsion Adhesive stands up under drum tests, compression tests, tensile-strength tests. Sift-proof, water-resistant. No wire stitches to damage goods or hands—nor reduce printed surfaces.



—for **MULTI-WALL and SPECIALTY BAGS**. Whether you use wet strength, coated or highly calendered paper, you'll get a better product with the better bonding, moisture-resistant, high-solids GRX Resin Emulsion Adhesives.

GRX Adhesives are made in accordance with strict specifications of the Dewey & Almy Chemical Company's formulas, which have been known for a number of years under the trade name Darex.

Today these same adhesives—plus improvements—are being offered in our GRX Series and are available through ARABOL'S Brooklyn, Chicago, Los Angeles and San Francisco plants.

Thus the extensive, specialized experience of Dewey and Almy—in the adhesives field—is added to ARABOL'S 71 years of pioneering in adhesives manufacture. The resin emulsion adhesives will be made and stocked in ARABOL'S Brooklyn, Chicago, Los Angeles and San Francisco plants—service and orders will be expedited from our ten plants and warehouses.

Users of Darex Resin Emulsion Adhesives are

now cordially invited to call upon the nearest ARABOL plant or warehouse, where their requirements will be quickly identified and met.

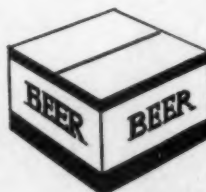
Somewhere in your manufacture there is a need for GRX Adhesives.

To ARABOL'S wide line of industrial adhesives, the acquisition of these time-tested formulas represents a major addition.

Whatever your adhesives requirements—in the making, packaging, labeling or shipping of your product . . . we invite the opportunity to supply samples for you to test in your own plant—under your particular working conditions—for your specific requirements, whatever their nature. That is the one kind of testing that assures you of satisfactory results. Your inquiry to Department 54 will bring a prompt response.



—for moisture-resistant **CASE SEALING**. For either hand or machine application—wherever high humidity and moisture conditions prevail—GRX Resin Emulsion Adhesives grip hard, set fast, resist mold.



—for laminating **TAPES and SHEETS**. When laminating kraft to other papers, reinforcing materials, films or foil—GRX Resin Emulsion Adhesives grab quickly, spread far. You get a moisture-resistant bond that remains flexible at low temperatures.



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Everyday . . .

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But your vote counts everyday!

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It is our job at HAZEL-ATLAS to sell your candidate day
after day, for an H-A package is designed to do electioneering
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It is the home vote that counts, and H-A means Home Approved!

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*They move faster...
from maker to market...
thanks to **US** boxmaking
and packaging machines*

US boxmaking and packaging machines do their jobs accurately and efficiently—keep hundreds of today's finest products on the move, in long, steady progression.

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If your production is lagging because of packaging problems, call on **US**—our engineers and machines can help you.



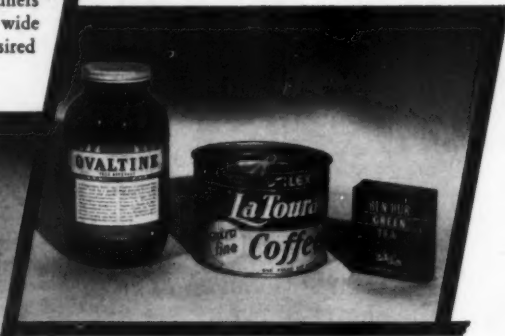
BRIGHTWOOD BOX MACHINES Several models glue and form a broad variety of box styles in a wide range of sizes. Models available for standard single glued end and turned over end boxes. Change-overs are quick and economical.



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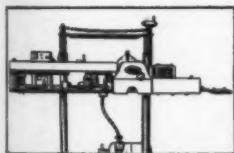
Sept. 11-14



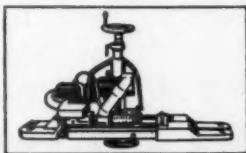
CONTINUOUS BAND SEALER: best heavy duty unit for sealing plastic bags—polyethylene, vinyl, plicofilm, saran (with labels) Doughboy

ROTARY SEALERS are ideal for cellophane, glassine, foils, laminates. Inking or embossing coders and hole punch are optional.

World's most complete line of Heat Sealers!



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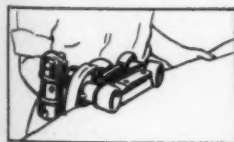


UTILITY SEALER offers big machine advantages for intermediate packaging. Models available for both polyethylene and cellophane.

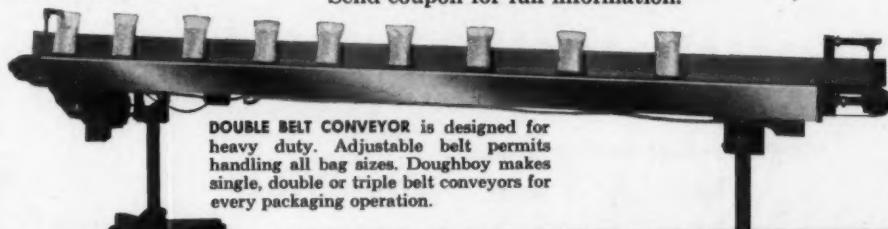
Doughboy offers you the most complete line of heat sealing machinery available to do a better, more efficient job of packaging. Shown here are just a few of the Doughboy units which are *engineered* for faster and more flexible packaging.

Doughboy units today are cutting costs for manufacturers all across America and in many countries abroad. Why not let our engineers work with you on *your* heat sealing problems?

Send coupon for full information.



POWER HAND SEALER, available in 3 models, is a versatile unit for both portable and bench use.



DOUBLE BELT CONVEYOR is designed for heavy duty. Adjustable belt permits handling all bag sizes. Doughboy makes single, double or triple belt conveyors for every packaging operation.

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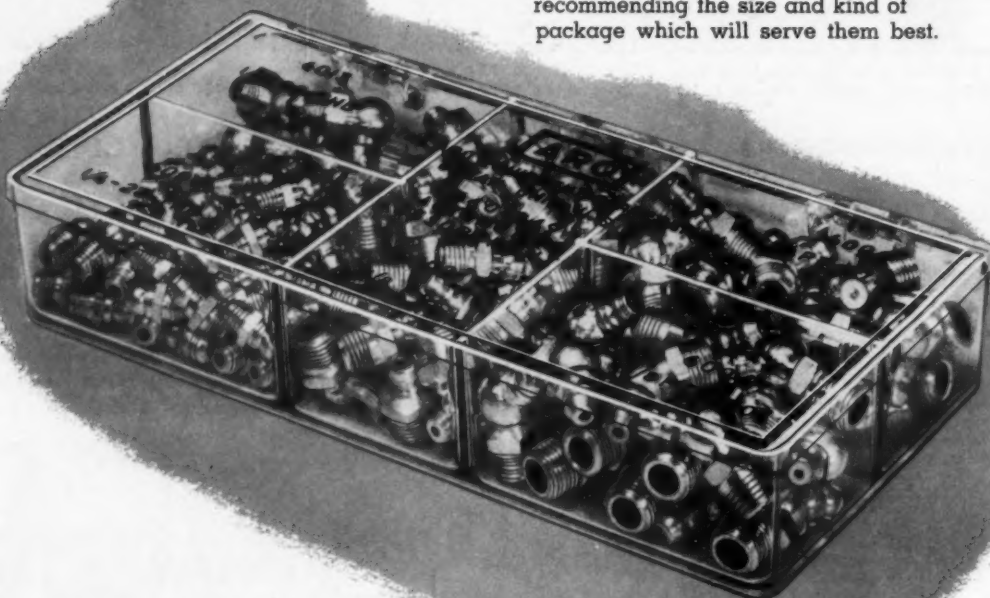
VLCHK PLASTIC BOX

Increases Sales

"We have been well pleased with the reception given this merchandising item by our automotive jobbers," writes The Aro Equipment Co. of Bryan, Ohio. "The transparent Vlcek Box, holding our automotive fitting assortment, permits easy identification of the products and has helped to increase both the retail and wholesale sales of Aro Fittings."

Also accounting for the favorable reception of this box is the way it shows thread size and model numbers on the box cover—resulting in quick identification in service stations and garages. For many of our customers we hot stamp lettering on the boxes for the purpose of ready identification of contents.

Not only in the case of automotive fittings, but also drugs, foods, small mechanical parts, cutlery, hardware and many others, Vlcek Plastic Boxes display and sell to advantage. We help users by recommending the size and kind of package which will serve them best.



If you have a packaging problem,
...let's talk it over.



← We supply eight standard sizes of boxes with 548 different compartment arrangements in clear or opaque colors. Specials or standards, we supply them at stock-box economy. Specials involve variations in color, shape, interior design and hinge design.

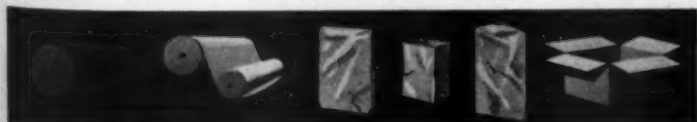


Rough and tumble delivery jobs are the natural element for FROSTKRAFT bags and boxes.

Every FROSTKRAFT packaging product is sent out into the world to be just as tough as the situation requires. Starting with the strong, hard fibers of Southern Pine grown in Olin Mathieson forests — through processing and converting in Olin Mathieson plants — FROSTKRAFT packaging is held to perfection-only standards of quality control.

If you've got a mean kraft packaging problem, tough-tempered FROSTKRAFT will whip it down to size. Your FROSTKRAFT representative has the experience to help you . . . right now . . . why not call him?

**Rough Deliveries
Made Easy
with
tough-tempered
FROSTKRAFT
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The Tupper Engineering Department has developed the greatest number of patents in the industry for polyethylene seals, closures, and dispensers—and other items in other plastics. This know-how can be tapped by you to place your plastic products in a position of leadership.

Tupper seals and other Tupper products are protected against unauthorized manufacture by about 150 U. S. and foreign patents and patents applied for, plus numerous trademarks and copyrights.

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Today's merchandising!**



"Skin-Tight" Transparent Wrap Packages... Protects... Displays... and SELLS every type of product!

Put your product into its own self-contained display with SKIN-PACK — and watch sales zoom! No other packaging method gives you so much eye appeal... so much "pick-up" attraction... at such low cost. And SKIN-PACK is the peak of packaging versatility—ideal for practically any solid product, of any size, shape, or material. In supermarket, drug, variety, hardware, and other self-service outlets, leading national products have already proved the tremendous sales increase that follows packaging in SKIN-PACK!

NO COSTLY MOLDS!

With SKIN-PACK, your product is its own mold. Product and display card are automatically coated with a tough, transparent plastic "skin"—vacuum-formed to show every selling feature, yet completely protected. A single SKIN-PACK machine can produce up to 24,000 packages a day—ready to sell your product on sight!

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FREE!

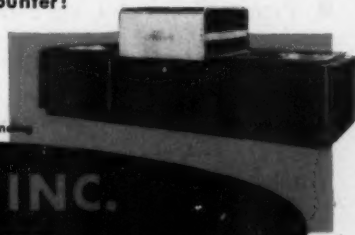
A Personal Demonstration of "SKIN-PACK" on Your Own Product!

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OR SEND US samples and literature — we'll SKIN-PACK them and return them without cost or obligation!

There's a "SKIN-PACK" Machine for your product and your operation. Investigate this modern miracle-package today!

Patents Pending



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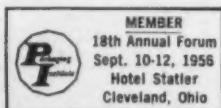


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BERCO is completely
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Berco's Contract Packaging Service Covers:

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NEW! HH Chestnut Semi-Chemical Corrugating Medium withstands constant exposure to high humidity. Odorless. Its extra rigidity meets your requirements for higher top-to-bottom, end-to-end compression in your containers.

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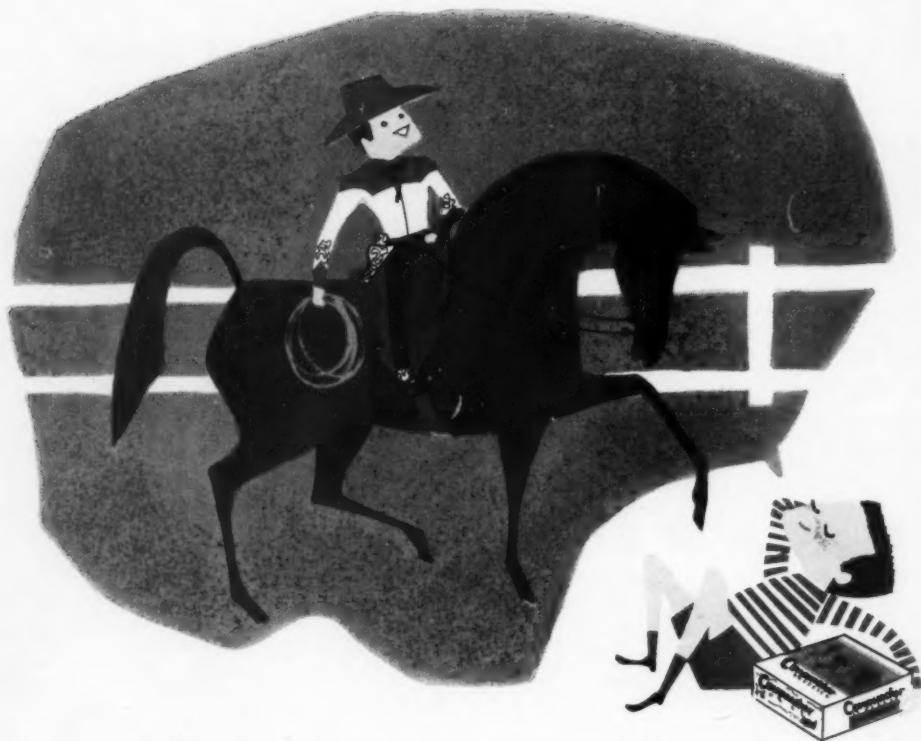
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That's the kind of modern merchandising in which packaging can play so large a part,

whether you sell boots, bolts, or bath salts. To make the most of this merchandising-concept of product presentation, see your Gardner representative. He's schooled and skilled in making the most of packaging's immense selling potentials.



Many of America's greatest products go to market in "Cartons by Gardner"

GENERAL OFFICES: Middletown, Ohio—PLANTS: Middletown, Ohio; Lockland (*Cincinnati*), Ohio
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THE GARDNER BOARD AND CARTON CO.



Manufacturers of Folding Cartons and Boxboards



From the Gardner Gallery of Famous American Packages

BOOTS
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with **NASHUA** PRINTED PACKAGING

Accuracy of register . . . uniformity of color, not only over an entire press run, but from run to run — these give Nashua-printed packages repeat sales-power. Ask to have a Nashua representative call and show you "The Power of the Package". Nashua Corporation, Dept. PM-8, 44 Franklin St., Nashua, N. H. Sales offices in New York, Philadelphia, Chicago, San Francisco, and Peterborough, Ontario.

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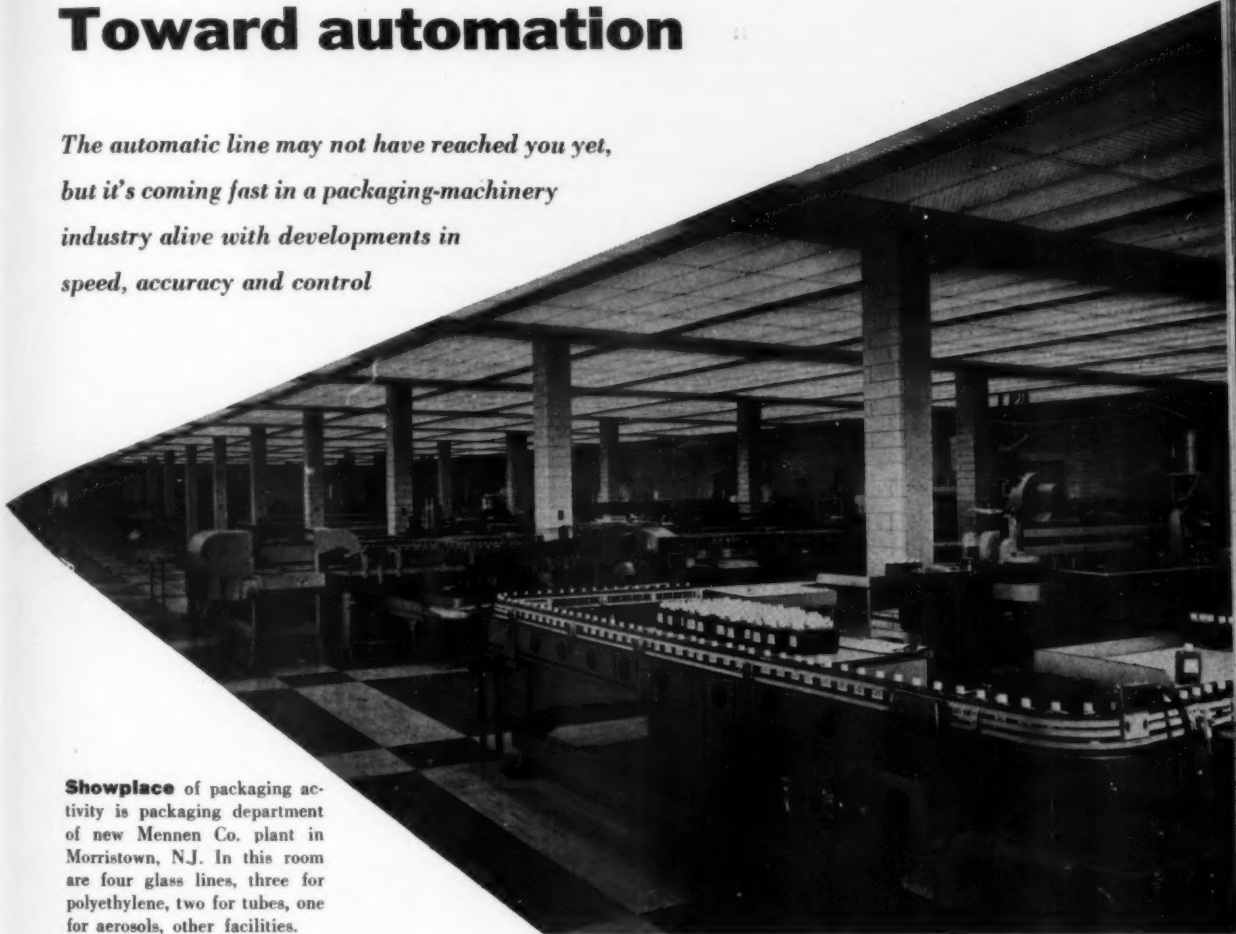
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MODERN PACKAGING

Toward automation

The automatic line may not have reached you yet, but it's coming fast in a packaging-machinery industry alive with developments in speed, accuracy and control



Showplace of packaging activity is packaging department of new Mennen Co. plant in Morristown, N.J. In this room are four glass lines, three for polyethylene, two for tubes, one for aerosols, other facilities.

Automation is a much-abused and mis-used word. Technically, it applies only to a machine that will feed, regulate and run itself, without human attendance.

Probably there is no single packaging machine that could be called "automatic" in this sense. But there are today combinations of machines, with automatic in-feeds and outfeeds, that in sum total do fill the role of automation. There are, for example, automatic bakeries in which machines receive bread ingredients, mix the dough, shape it, cut it into loaves, put the loaves in the ovens, take them out, slice them, wrap them, pack them in

boxes, seal the boxes and deliver them to waiting trucks.

Such all-out mechanization can be applied justifiably only to a highly standard product produced in tremendous and continuous volume. Few packaged products other than bread would warrant it today. Yet the rapid progress being made toward automation, in every type of packaging machinery and in every product field, is the single most significant packaging-machinery trend of 1956.

The incentive toward elimination of every possible hand operation in the packaging line is not hard to find. It is estimated that the average cost

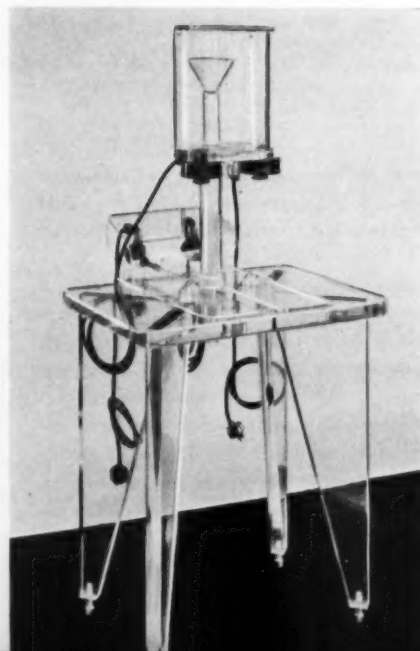


Complete system for automatically setting up a windowed folding carton, conveying, weighing, filling, check weighing and closing. This new line is designed for the packaging of free-flowing products of a delicate nature. *Machine by Wright Machinery Co.*



750 jars a minute is speed of this do-it-all machine that feeds baby-food line. Cases of empties are automatically opened, emptied, jars rinsed and fed in four lines on pocketed conveyors toward the filler in the foreground, off picture. Meanwhile, empty case is automatically inverted (upper left at rear), blown clean and conveyed to the head of the line for repacking. *Machine by Standard-Knapp.*

Product problems are handled today by such ingenuities as this all-plastic filling machine, designed for corrosive products. All parts in contact with the product are made of acrylic plastic. Two-spout semi-automatic machine will handle all plastic or glass containers up to 1 gal. *Machine by Monjonner Associates, Inc.*

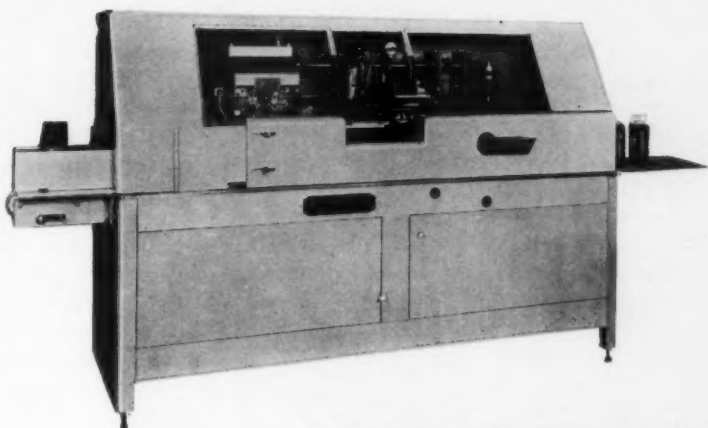


of a factory line worker, including direct wages, fringe benefits and indirect costs, is now between \$5,000 and \$8,000 a year.

Where human help is still required to attend a packaging machine—or, more often, a whole packaging line—in the more modern plants, the employees have become monitors, not operators in the old sense. Even small companies, and small machines, must have a high degree of automation to compete today.

Since true automation can only be achieved by the closest kind of cooperation and coordination between the various elements of a packaging line—

Saddle-label bags are automatically sealed and a header label applied in this high-production, continuous-line machine. Machine by Peters Machinery Co.



and between machines and the materials that feed into them—it is significant that next month will see, at Cleveland, the first specialized Packaging Machinery & Materials Exposition. Details of this event will be found in the article starting on p. 152.

The impetus for this first "Machinery Show" as distinct from the annual over-all National Packaging Show, comes from those who believe that mechanical development in this field has reached the point where it is advisable for the makers of packaging machinery, the makers of packaging materials that feed the machines and the users of the materials and machinery to get together to concentrate on their mutual problems.

This is an appropriate time, in advance of the show, to lay out for examination both the problems and the progress.

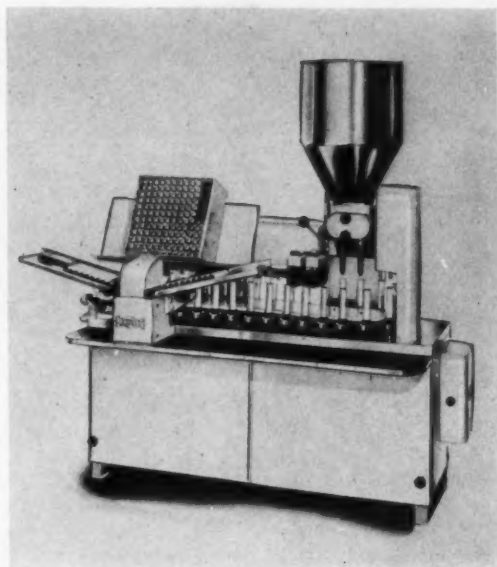
On the basis of a survey just completed by MODERN PACKAGING, the general movement toward labor-saving automation can be broken down into the following distinct trends:

- ▶ Toward higher speeds.
- ▶ Toward greater accuracy of fill.
- ▶ Toward smoother, continuous motions.
- ▶ Toward lines fully coordinated to perform a complete packaging operation—from the end of processing right through to the shipping dock—without a break.

Higher speed

The desire for higher speeds is, of course, a perennial, but never more pressing than now because of our booming economy and sharp competition, which make it imperative to get ever more production out of the same facilities and labor.

The production of baby food, for example, has been pushed to the machine-gun rate of 1,200 cans a minute from a single line. Foods, generally, have achieved the highest speeds, but other industries, too, are stepping up. A new line for Bristol-Myers' Bufferin, for example, will operate at 300



Faster tube filling is claimed with this new machine which has blowing and suction cleaning, cap tightening, air-free filling, photo-electric design registration and various optional coding and crimping methods—all of which is done at a speed up to 100 a minute. Machine by Arenco Machine Co.

vials per minute, including automatic insertion of cotton and application of a polyethylene snap-cap.

The easiest way to multiply the speed of a filling or capping machine, of course, is to multiply the number of heads, and visitors to next month's show will see numerous instances in which the output of a familiar machine has been doubled, tripled or quadrupled by this expedient. But higher speeds and multiple automatic operations call for the kind of control that only an electronic brain can give. The electronics engineer is becoming as important to packaging machinery as the mechanical engineer.

Essential to speed is accuracy of materials. The survey makes it clear that packagers are asking for lower tolerances on materials destined for today's

high-speed lines and backing up their specifications with tighter incoming-materials inspection and control. There is much interest in standardization movements such as the suggestion recently¹ by one of the carton companies that the industry get together to standardize the design of tucks and flaps in folding cartons and eliminate minor differences between producers which serve no purpose except to complicate packagers' machine adjustments.

Higher speed puts a greater premium on mainte-

signers. But, here again, the marvels of electronics have come to the rescue and the two goals are being achieved simultaneously.

It is not enough now for the machine merely to spot and reject badly filled containers and perhaps keep a graph of the "overs" and "unders." The latest principle, new during the last year, calls for automatic correction of the filler to compensate for changes in weight and changes in condition—a big step toward true automation.

One of the can companies has a fill-control device, first adopted by Atlantic Refining Co. on a motor-oil line, which actually compensates for changes in product temperature which affect the volume of oil being delivered. (See "Temperature-Sensitive Fill Control," p. 158, this issue.)

A mechanism using a similar principle, capable of physically weighing every can in the line if necessary and feeding back the information to the filler, was demonstrated in May at the Chemical Specialties Mfrs. Assn. convention.

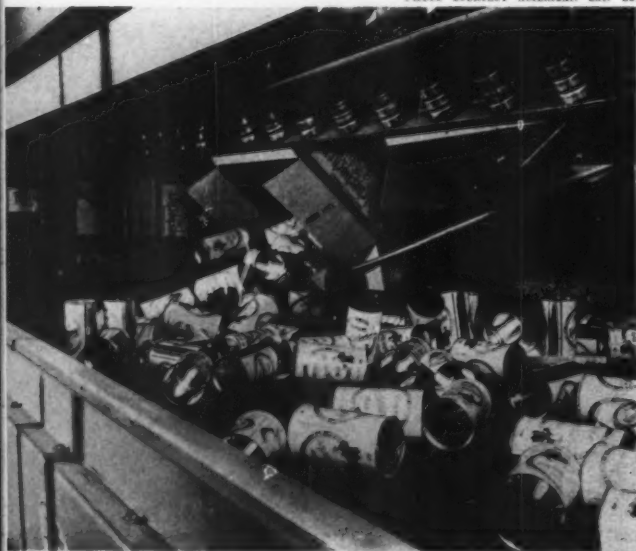
The standard of accuracy in the aerosol industry used to be plus or minus 2%; now it is down to a tolerance of 1 gm. on 300- to 500-gm. fills. Even in such large quantities as half-gallons, dairies are now demanding and getting tolerances of as little as two-tenths of an ounce per half-gallon of milk.

Continuous motion

The day of the old reciprocal, cam-operated, start-and-stop machine is rapidly passing, if not already gone. Continuous, constant, non-stop motion is the rule today, with rotary action and screw-driven feeds. This is true not only because constant-motion machinery is generally faster, longer-lived and freer of maintenance, but because the combined problem of higher speed and more fragile packages has no other solution.

Polyethylene squeeze bottles and molded rigid plastic containers—light weight and relatively fragile—have reached a volume of use in certain fields where they must have high-speed automatic machinery for filling and capping. Glass containers, made progressively lighter through the years, are now going through another development stage which promises to cut another 20% from their weight. This puts a new premium on gentle but high-speed handling.

"I think," says one of the leading authorities in the packaging-machinery field, "that we are just on the threshold, or perhaps we have crossed the threshold, of a wholly new era in the speed of machines and this, in general, means a wholly new approach to the handling of the package itself. We can no longer submit packages to the pounding of reciprocal motions. Machines are just being de-



Automatic carton unloader at the Ruppert Brewing Co., New York, opens carton flaps and drops cans on moving belt of unscrambler. Photo shows partially inverted carton on transport belt, a carton being emptied and an empty carton being discharged for return to packing station. Unloader can feed containers at a rate of 1,200 per minute.

nance, for the production loss from down time is that much greater. So there is a distinct trend toward simplified or built-in lubrication, including the one-shot lubrication system and, more recently, liberal use of sealed bearings which are good for a year or two of use without attention and then can be easily replaced.

Greater accuracy

Along with higher speeds, packagers are demanding even greater precision in fill and weight, thereby compounding the problems of machine de-

¹See "Standard 'Bend' for Folding Boxes," *MODERN PACKAGING*, Feb., 1956, p. 199.

signed that can run at really high speeds with relatively fragile packages. This has meant a new concept of constant motion, in which a package comes into a machine at a constant motion and comes out of the machine at a constant motion, and maintains that constant motion all the way through the machine."

A manufacturer of labeling machines says: "We seem to be learning more and more how to get the advantages of high speed through non-stop, rotary motions and still provide versatility. Where that is accomplished, a new simplicity results, in addition to higher capacity. The feed screw is a shockless method of handling glass containers in a labeling operation and is definitely the latest vogue, as contrasted with the old-fashioned method of grabbing the bottle by a pair of jaws, transferring the bottle to the main conveyor of the machine with a hasty action and then having the bottle travel through the machine on an intermittent spaced basis."

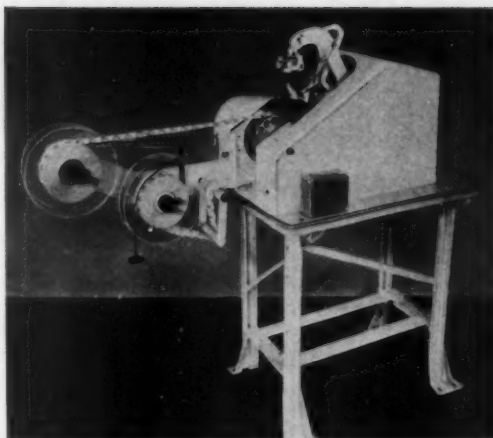
Coordinated lines

More and more today, packagers are thinking in terms of complete, coordinated lines to handle a product without a break, straight through from filling to case sealing and pallet loading, rather than of merely putting a machine in here and there to eliminate a hand operation.

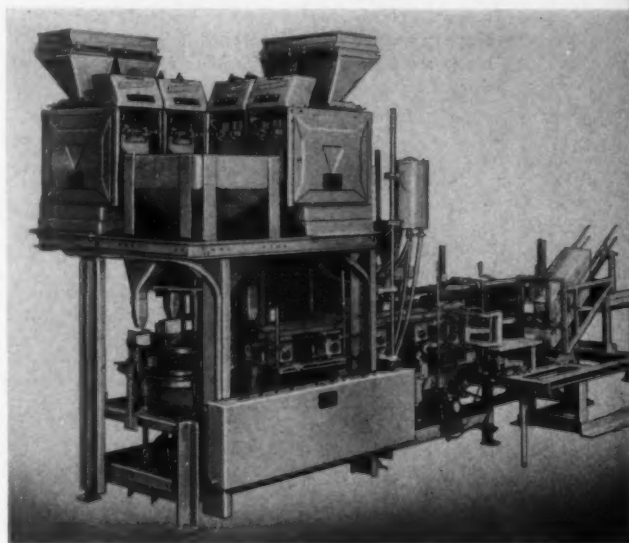
This requires the closest kind of cooperative planning between the packager, the containers and materials suppliers, and the manufacturers of conveyors, fillers, cappers, labelers, cartoners, bundlers, casers, case sealers, pallet loaders and the dozens of other pieces of auxiliary equipment that may be required for a particular product.

As evidenced by the Cleveland show itself, this movement toward the cooperation of the manufacturers of separate and specialized machines, to provide automatic feeders and automatic built-in connecting links between machines, is one of the most important trends in 1956.

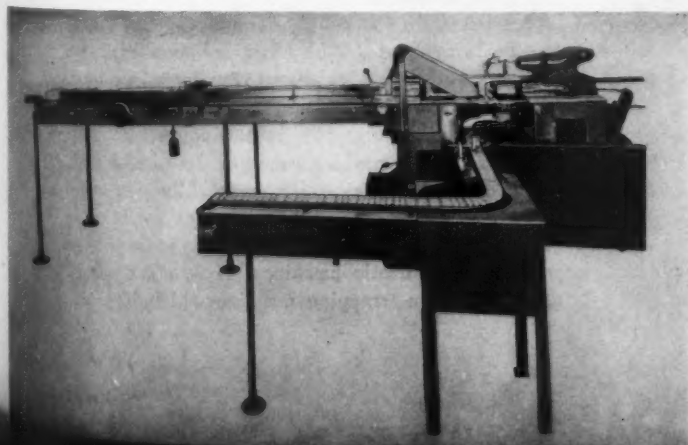
Probably the single most important contribution



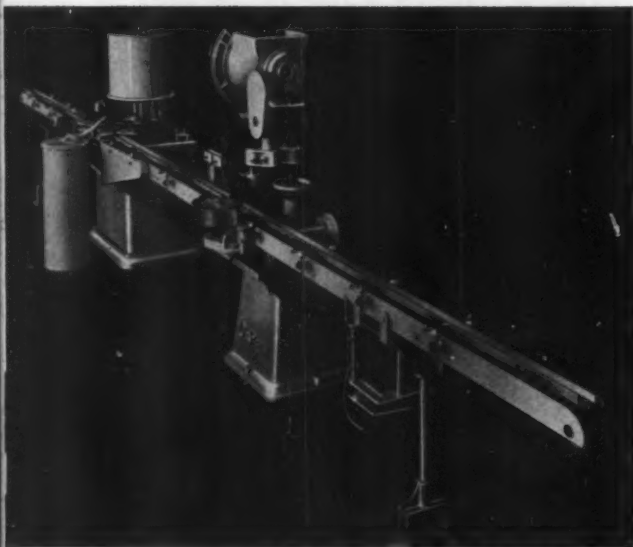
Imprinting machine answers bakers' problems by printing all variable information on partially pre-printed roll labels, as needed. Machine was developed with cooperation of manufacturers of labels and wrapping machines, to assure coordination of line. Machine by Markem Machine Co.



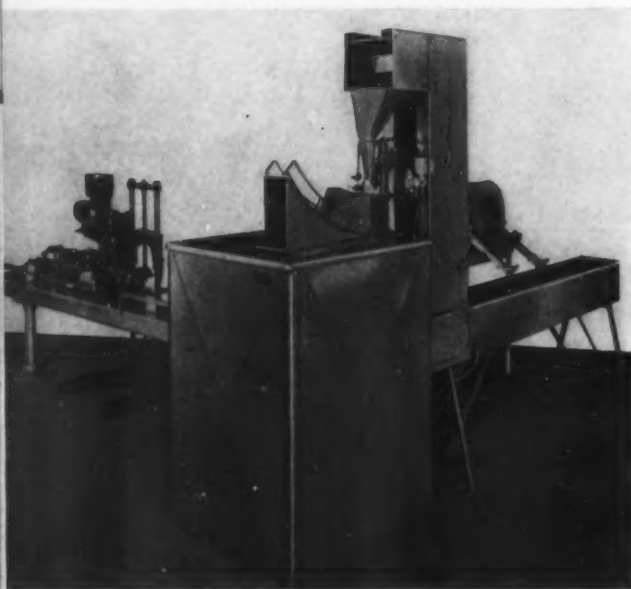
Fully automatic carton filling and top-and-bottom sealing machine offers exceptional versatility. It comes with rear or overhead feed by net weight, auger or volumetric methods and will handle cartons from 1-by-3-by-4 in. up to 5-by-10-by-14-in. at speeds up to 60 per minute. Machine by Triangle Package Machinery Co.



Accumulator and bundler for Eastman Kodak Co. provides single-line infeed of film cartons to elevator of the machine, where 25 are grouped and wrapped in heavy kraft and end labels applied. Machine by Hayssen Mfg. Co.



Integrated line for Bristol Myers' Bufferin offers a new high speed of 300 per minute with automatic cotton inserter (left) and polyethylene snap-capper. The cotton is inverted before inserting to avoid loose strands. *Machines by Consolidated Packaging Machinery Corp.*



Hand feeding is ended with this automatic bag and parts handling machine which feeds, opens and fills envelopes in a wide range of sizes and with various types of product feeds to suit nature of product. Bag magazine holds from 600 to 900 bags. Speed is variable. *Machine by Frazier & Son.*

toward constant-output, non-stop lines is the provision of accumulating tables, or bellows, between stages of the line. Most manufacturers can now provide such accumulating tables as a part of their equipment, either ahead of or after the operation. The accumulation of a reserve of output not only takes care of any differences in operating speeds or capacities of the various machines, but provides a backlog so that in the event there is a momentary shutdown of any one machine, the rest of the line can continue to function.

Machinery manufacturers almost unanimously emphasize the necessity of having suppliers of materials and containers in on the planning of a coordinated line, to establish workable specifications that the machinery maker can build to and that the packager can count on for smooth, trouble-free operation.

"It is obvious," says one of them, "that a machinery manufacturer cannot guarantee production speeds of his equipment unless very close control is maintained at all times of materials which are handled on the machines. Although the machinery manufacturer can demonstrate that his machine is capable of cycling at certain high-speed rates, the customer will only be able to obtain the full efficiency of the equipment at these higher speeds if the materials used conform to very strict and definite specifications."

Other trends

Other trends and observations to be gleaned from the MODERN PACKAGING survey include these:

Elimination of hand operations finds its most fruitful field now at the two extreme ends of the line. Middle-of-the-line operations such as filling, capping and labeling are generally automatic; hand labor still is used in most plants to start empty containers into the line and to case and remove filled containers. But that these beginning and ending steps can be mechanized is demonstrated in the beer industry, where in some operations now not a hand touches the package from the time the case of empties leaves the freight car until the filled and sealed case returns to it. Machines lift the case of empties from the conveyor, dump it, unscramble the bottles and, at the other end, put the bottles back in the case, seal it, arrange cases in pallet loads and convey them back into the freight car. One can manufacturer now has an automatic can-delivery system by which cans can be discharged direct from a highway trailer to the filling line at 1,200 a minute.

Hand feeding is being eliminated even in some small, semi-automatic machines. The maker of a small, sheet-film wrapping machine which has al-

ways been semi-automatic expects shortly to eliminate the operator, as the feeding of both the package and the cut wrap will be automatic. A small bag-filling machine now automatically feeds bags from a magazine and opens them to the filler. Automatic marking and code-dating machines have eliminated workers from many lines.

Handling of problem films is being solved by manufacturers of wrapping machines. Equipment to handle and heat seal any known plastic film, including polyester (Mylar), can be had today. But most of those now in use are adaptations of standard cellophane equipment; what may be seen in the near future is a completely new overwrapping machine, built from the ground up, specifically to handle the softer plastic films at high speed.

New adhesives systems are rapidly eliminating the headaches and lost time formerly associated with the glue pot. The newer labeling machines use a circulating glue system, by which the adhesive is pumped to a point immediately above a vertical glue roll and flows down over the roll by gravity, the overflow returning to the original reservoir for recirculation; this stops milling and evaporation and keeps the glue at a constant, trouble-free consistency. (See "Non-Stop Label Gluing," p. 126, this issue.) Also new is a dry, rope-type thermoplastic adhesive, reported on in this issue (see "Adhesive on a Reel," p. 168) which is fed from a reel and melted only an instant before it hits the glue-applicator roller; this eliminates the glue pot entirely.

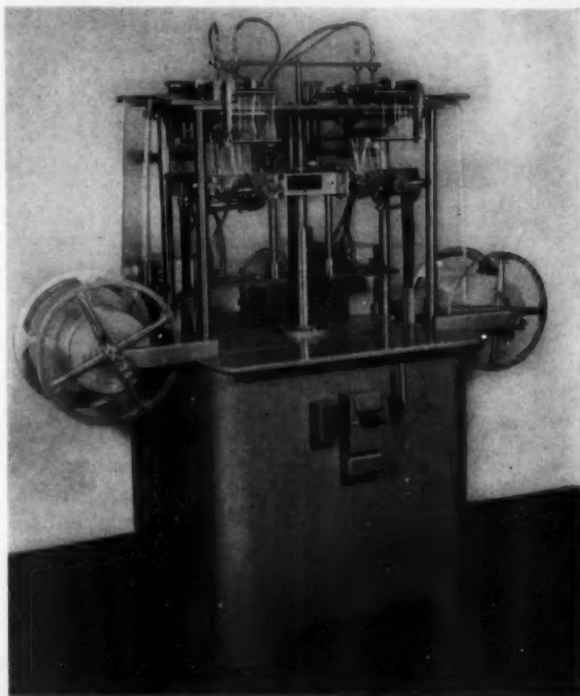
Unit and strip packaging is making rapid strides, with the availability of a dozen types of machines ranging from table models to big, high-production units. Developments in materials have accelerated the trend. Laminated and coated films and papers are now available for such machines to meet any product requirement. And the machines themselves can count and fill hardware items and tables, or fill precise amounts of powders, pastes or liquids.

In-plant package manufacture is gaining in some quarters as a part of the new concept of the fully integrated production line and as a means of avoiding incoming shipment, handling and storage problems. Development of high-speed, integrated folding-carton equipment—which feeds from a web, prints, cuts, scores, creases, trims and stacks, all automatically—has attracted some large users of cartons to in-plant operation. Thermoforming of plastic sheet into cups and other package forms is so simple in the newest automatic machines—some of which are designed for continuous operation from web-fed stock—that in-plant operation is a logical approach for large-volume users.

Multiple-unit packaging of canned and bottled

products in bands or cartons is expanding rapidly with the development of several automatic machines to handle the various types of constructions. Additional developments are on the way.

Trend of location of packaging itself is steadily back closer to the source of the product. Fishing vessels become packaging plants, in which the freshly caught fish is packaged and frozen, ready for market. Others are floating canneries. And produce packaging moves into the grower's shed or



Liquid packaging at a speed of up to 240 packages per minute is offered by this multiple machine which fills and seals from two to eight packets per cycle. Machine by Brown Bag-Filling Machine Co.

sometimes right into the field, where lettuce, for example, is picked in the chill of night and packaged in mobile machines while fresh with dew.

Problems

The booming progress in packaging machinery which our survey discloses is not without its problems.

The packaging-machinery manufacturers complain of the squeeze between [Continued on page 237]

The first refillable aerosol

*Helene Curtis makes aerosol history
with purse-size vial
that can be reloaded from "mother" can
of aerosol hair lacquer;
two are sold as a combination deal*

A new, refillable purse-size aerosol package for hair spray, just introduced for Helene Curtis Ultra Spray Net, has opened up exciting new merchandising vistas in the rapidly growing aerosol container field.

Scarcely larger than a lipstick, the new Helene Curtis Purse/Spray, an attractively designed plastic-coated glass container, is the first refillable aerosol. It can be refilled, from a larger master aerosol can that comes as part of the deal, as readily as a cigarette lighter. The innovation is being heralded by the biggest promotion in Helene Curtis history.

Although the original, wartime, heavy metal "bug bombs" were refillable at the factory, this is believed to be the first time that the process has been simplified so that it could be done by the consumer.

The purse unit (it holds $\frac{1}{2}$ oz. of Spray Net) and its metal refiller container, which has net contents of 4 oz., are sold as a combination offer, packed in a special paperboard box printed in black and two shades of green. The refiller is not a sprayer. However, a forthcoming "two-way" Ultra Spray Net container will probably be on the market by the time this article appears. It will be similar to the present home-use metal aerosol for Spray Net, except that it will be sold with an adapter tube in the cap. The regular spray nozzle can then be removed and the adapter tube will convert the aerosol into a refiller aerosol.

The idea of a convenient, refillable, hair-spray container which could be carried in the purse for



Dainty purse-size vial is a plastic-coated glass aerosol containing half an ounce of hair lacquer, enough for frequent "touch-ups" away from home. Colors of the container are black and gold.



Accuracy of spray is such that hair ends can be easily touched up with the purse-size vial without removing hat, as is demonstrated by this airline stewardess.

use at any time originally occurred to Helene Curtis marketing officials approximately four years ago. In the interim, a great deal of development and experimental work was carried out to make certain that such a container, which could be sold with greater economy than a disposable "one-time-use" miniature aerosol, was practical from both the production and the marketing standpoint.

In the final stages of development, the new Helene Curtis Purse/Spray required intensive work by numerous departments of the company. Helene Curtis does its own aerosol loading. The cooperation of suppliers of aerosol containers and valves in making the new package possible is also acknowledged by Helene Curtis representatives.

Original packaging

Both the purse-size glass aerosol and the metal "mother" container are strikingly styled in gold and black, giving the combination package excellent counter display and sales appeal. The glass container, jewelry finished with fired-on gold mesh accents, carries a protective coating of clear vinyl which gives it a comfortable feel when held in the hand. This package is topped by a gracefully domed onyx black molded plastic cap, whose internal ridges insure a tight fit over the brass ferrule at the top.

The removable spray button, also in black, is molded of nylon and includes a white insert which contains the spray orifice. The button is designed with a hollow stem which inserts firmly into the

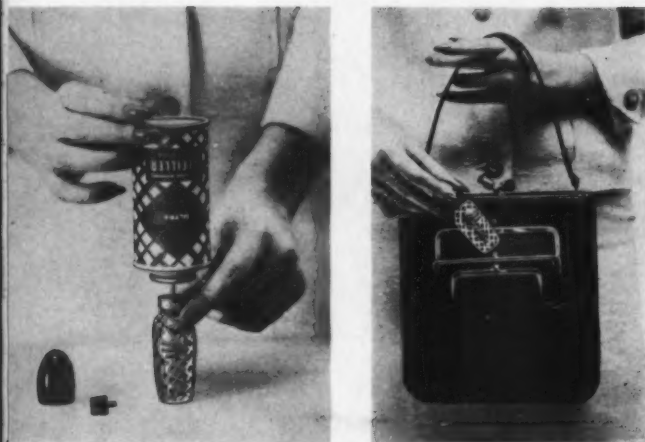
valve mechanism. The latter, which includes molded nylon parts used in conjunction with a polyethylene dip tube, is locked permanently in place by the brass ferrule which is crimped and spun into position on the neck of the container.

The valve in the small aerosol is designed with sufficient "travel" and spring pressure to prevent accidental discharge while being carried in the purse, yet is extremely easy to operate, due to the finger-fitting tapered design of the spray button. When the aerosol is not in use, the spray button is also shielded by the snap-off closure. The white insert in the spray button, together with an arrow molded in the top surface, insure accurate aiming of the container in applying the spray to the hair.

Refilling

After the original supply of product in the aerosol has been exhausted, it is ready for refilling. The principle involved in this process—the fact that unequal pressures when brought into conjunction tend to equalize automatically—is well known, having been put to use in such devices as those employed to "bleed" air from one tire into another. The particular method used to accomplish this result in the Helene Curtis Purse/Spray has been covered by a patent application.

Refilling of the purse-sized aerosol is accomplished by removing the spray button and inserting the transfer or refill stem of the parent container into the top of the smaller unit. In doing so, the



Refilling from metal "mother" container is done in a second, simply by removing spray button from small vial, inverting large container, inserting refill stem and pressing down. Pressures will equalize. Small vial will take a larger charge if it is pre-cooled in the refrigerator. Back in the purse goes tiny vial, ready for a dozen more uses.

smaller aerosol is placed on a level surface and the lithographed metal cap is removed from the refiller container. Then the refiller unit is turned upside down and the transfer tube is inserted into the top of the Purse/Spray, care being taken to keep the can in an upright position. Downward pressure then opens both valves simultaneously, permitting the pressure within the supply unit to force a new supply of product into the miniature aerosol.

At normal room temperatures, the amount of liquid transferred into the glass aerosol will approximately half fill the bottle. This quantity is ample to last the average user several days. If a more complete filling is desired, this may be accomplished—as the user is instructed—by pre-cooling the small container in the refrigerator or beneath a cold water tap prior to filling; this reduces the amount of residual vapor pressure in the Purse/Spray and creates a greater pressure differential between the two containers.

Since the metal aerosol container has no dip tube connected to the transfer stem and valve assembly, liquid is forced directly into the smaller aerosol when the supply unit is inverted and both valves brought together under sufficient pressure. The transfer of product stops automatically as soon as the pressures within the two packages have been equalized. The valve employed in the parent aerosol, which is otherwise a conventional aerosol can, is specially adapted to perform the desired refilling operation.

The high safety factor of the new Purse/Spray aerosol is illustrated by the fact that its tests conducted by Helene Curtis, the filled containers have been hurled against walls under high temperature

conditions without shattering. Pressure within the unit is relatively low; in addition, the glass walls are made shatterproof by the transparent vinyl plastic coating.

The refiller aerosol, containing a sufficient supply of Ultra Spray Net for 8 to 10 "rechargings" of the purse-size package, carries a gold foil label printed in black and white, whose design harmonizes with the surface decoration of the spray bottle.

The supply container's metal cap, lithographed in gleaming black and gold, snaps securely in position inside the beaded top rim of the container, yet is easily removed when refilling of the small unit is to be performed. Complete directions for the simple refilling operation are printed on the foil label, as well as on the back of the folding paperboard counter display package in which the two containers are being sold. To eliminate possible pilferage from retail sales counters, the Purse/Spray is secured firmly to the riser of the display package by means of a metal staple.

Credits: Plastic-coated purse-size glass aerosol by T. C. Wheaton Co., Millville, N. J. Molded plastic cap for purse spray by Wheaton Plastics Co., Weymouth Rd., Mays Landing, N. J. Metal refiller aerosol container by Continental Can Co., Metal Div., 100 E. 42 St., New York. Loading of refiller containers by G. Barr & Co., 3601 S. Racine, Chicago. Lithographed metal cap for refiller unit by J. L. Clark Mfg. Co., 2300 Sixth Ave., Rockford, Ill. Valves for purse spray unit and refiller container by Neuman-Green, Inc., 18 W. 507 Interstate, Addison, Ill. Counter display boot for introductory combination offer by Morris Paper Mills, 135 S. La Salle, Chicago. Foil labels for refiller unit by Excello Press, Inc., 400 N. Homan Ave., Chicago.

Selling unit is a die-cut paperboard boot, offering two containers at a bargain price. Ease of refill is explained both on can label and on back of boot. Refill can also will be sold separately.



Packaging for inventory

*Ford Instrument Co. solves problem of storing
thousands of electronic components till final assembly
with re-usable polyethylene bags with zip closures*

Literally thousands of different small parts and sub-assemblies are used in many of today's ultra-complicated electronic devices. Many of these instruments are produced in extremely limited quantities or even as one-of-a-kind models, which means that their individual components, after being manufactured, often must be stored for varying periods of time—perhaps as much as six months or more—before being finally assembled.

This presents a problem of packaging for inventory. One company which appears to have solved it in an exemplary fashion is the Ford Instrument Co., a division of Sperry Rand Corp., Long Island City, N. Y. This firm, one of the nation's largest producers of electronic instruments for the Government, stores its parts during this waiting period in plain, unprinted polyethylene bags, each of which is firmly closed at the top with a simple, slideless "zipper."

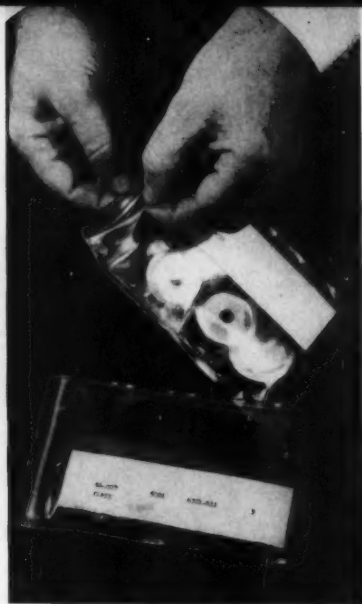
This closure is a patented locking device formed from two facing strips of polyethylene on the lips of the bag. On each strip are two grooves and, when the lips are pressed together, the four grooves interlock tightly, giving a tight, dustproof, moisture-resistant seal. Closures of this type have been used in the past on vinyl pouches for such things as eyeglasses* or articles of clothing. The idea has only recently been applied to polyethylene bags for packaging.

Besides the protection which it gives to the contents, this type of fastener has another big advantage: it can be closed or opened at will, as often as may be wished, by simple pressure of the fingers. Thus the parts, which

[Continued on page 258]

Credits: Polyethylene bags by Kennedy Car Liner & Bag Co., Shelbyville, Ind., using "Polytite" fasteners by FlexiGrip, Inc., 504 E. 75 St., New York 21.

*See "No-Zip Zipper," MODERN PACKAGING, Aug., 1954, p. 91.



Zipper-type closure on polyethylene bags used by Ford Instrument for storing parts actually has no moving parts, but can be opened and closed, airtight, just by pulling open and pressing together the grooved strip at the top. Parts and their identifying ticket are visible through the polyethylene.



Parts in storage are kept protected from dust, moisture and contamination, pending assembly order for equipment in which they are to be used. Bags are re-used.

ENTER:



A new kind of package, the cup is of light-gauge aluminum foil, gains rigidity through fluting of sides and paperboard disk under foil lid, which help effect hermetic seal.

One of the opening sentences in a carefully prepared U. S. Department of Agriculture handbook states that "people all over the world like and eat cheese."

For most people, that would stand as a reasonable and unadorned statement of an obvious fact about the most numerous and varied food family in the world.

But to a group of quality-conscious, sales-minded enthusiasts who work in the big office building just above the Chicago Loop at 500 N. Peshtigo, that statement is fine only as far as it goes. This month, Kraft Foods Co. has new proof that people not only like and eat cheese, but will buy and eat *more* cheese if the package and contents are new and exciting.

Kraft has just moved into national distribution with its new "Party Snack" line of pasteurized Neufchatel cheese spreads. The spreads represent a blend of one of the most acceptable cheeses in the world with foods and delicacies to make up a six-flavor combination. And for the packaging of its newest product line, Kraft has uncovered one of the most interesting new containers of the year—a 2½-in.-high, deep-ribbed, color-lacquered, aluminum-foil cup with fluted sides that reflect light like a beacon, and with a foil-paper cap which by a special technique gives a hermetic seal of surprising effectiveness for such a light-weight container.

The hermetically sealed foil cups were selected because they convey an immediate impression of quality and cleanliness, serve as a natural barrier

against taste and odor contamination from other sources and withstand liquid contact without swelling or softening. Cups of a different color are used for each of the six varieties.

Kraft is expanding distribution very fast on Party Snacks, after a test-market introduction which has proved to be "extremely successful," according to John B. McLaughlin, director of Kraft sales and advertising. "The vivid foil container," he says, "is an exciting addition to the appearance of the store dairy case. The interesting new flavors of the cheese spreads, the eye appeal of the package, and the convenience and ease of serving the product have created sales enthusiasm everywhere."

The reason for such optimism cannot be the size of the product, for the little Kraft sparklers hold only four ounces. Theoretically, the containers should be lost among the thousands of food items stocked by the average supermarket. But as Kraft sales records show, the new product line was an instant hit in virtually every store involved in its six test-market cities last winter.

The name "Party Snack" gets good shopper attention from entertainment-minded housewives planning informal meals. The attractive-to-serve and easy-to-store package characteristics are as up to date as the new cheeses the packages carry. Kraft Foods Co.'s kitchens have produced the smooth, mild cheese in six provocative combinations that have an unmistakable party aura about them; namely, Neufchatel with Onion Soup, Bacon and

the foil cup

Kraft's new Party Snack cheese spread line, introducing a colorful and economical ribbed-foil cup with hermetically sealed lid, becomes an instant sales hit

Horseradish, Pimentos, Clams, Dates and Chives.

The new package line is considered a worthy companion to the familiar 5-oz. Kraft decorated glass tumblers, which for years have brought steady and healthy profit to grocer and Kraft alike, and remain the most spectacular success in re-usable containers in the American food industry.¹

The new development, which is expected to have far-reaching impact, recalls Kraft's pioneering, in

1952, of its single-serving "Portion Control" packages of jellies and jams for restaurant service,² which led to considerable packaging activity along a similar line and which remains one of the biggest of all thermoformed plastic packages.

Since the initial test results on Party Snacks in Miami, Philadelphia, Chicago, Cleveland, Detroit and Minneapolis, Kraft production departments in the Beaver Dam (Wis.) and South Edmeston (N.Y.) plants have been working at top capacity

¹ See "Kraft Swankyswig" Hall of Fame, MODERN PACKAGING, July, 1949, p. 82.

² See "Portion Control," MODERN PACKAGING, April, 1952, p. 90.

New excitement comes to the dairy case with this bright array of six flavors of Party Snacks—each in a different color of lacquered aluminum foil. Ribbed sides help to catch and reflect light.



COLOR PLATES COURTESY KRAFT FOODS CO.

and more plants may be brought into service later this summer.

The manufacturer of the aluminum cups has recorded a five-fold production increase on these containers since Kraft placed its initial order about seven months ago and is currently scheduling a second five-fold increase to handle minimum requirements of its customer.

While today's grocery dairy department is a long way removed from the colorless, unimaginative rows of butter, cheese and milk that were standard not too many years ago, it is still wide open for a bold shot of sparkling color. The Kraft Party Snack packages have plenty of it. The six colors are red, orange, green, yellow, gold and purple.

Protection-wise, the ribbed-foil design, combined with certain inherent qualities of aluminum foil, has made possible an entirely new type of effective hermetic sealing that has the unique advantage of being readily and conveniently opened with the fingers without use of any special opening devices.

This is how the sealing is effected: The shoulder and side wall of the rim are coated with a flowed-in waxing gasketing material, which provides the basis for what is actually a two-point seal. The paperboard disk, with waxed glassine laminated to the under side, is deposited on the gasketed shoulder. The foil cover cap is then dropped on and, with a newly developed tow-in-type sealing head, the bead

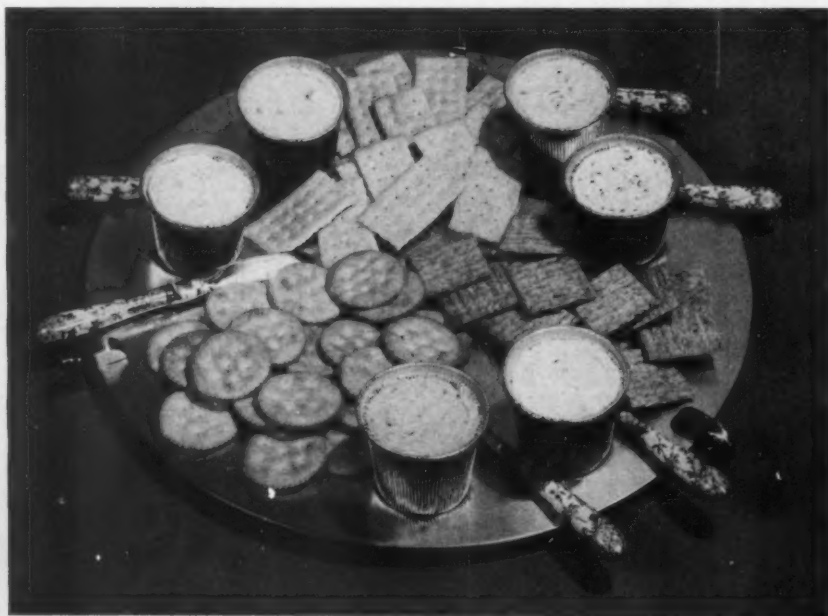
is literally wrapped around the edge of the disk, which serves to lock it firmly in place and provides a seal on the cup shoulder as well as around the edge of the disk.

Kraft will play up protection in its advertising and promotional work on the package. Point-of-sale material, now in the process of distribution to company salesmen and store merchandisers, will offer evidence that the six Party Snacks add plenty of glamour to either the dinner table or the serving tray. Advertising media—particularly the Kraft Television Theater and Sunday newspaper supplements—will also have the “they look wonderful on the table” theme. The leading aluminum company whose foil mills are providing the lacquered foil which forms the cups will display the little Kraft spreads on its television hour and in its business-paper advertising.

It was a packaging development for another food product as old as cheese itself—namely, wine—that brought about the new-type aluminum container. The so-called “aluvin capping” for wine bottles was perfected in Europe and brought to this country for the manufacture of foil wine-bottle caps. About three years ago a wine-capping machine was adapted for experimental work in producing a semi-rigid, tapered cup container.

Meeting the high-speed dispensing and capping requirements of the American food industry was the problem. But eventually there was perfected a

Gracious serving right in the package is made possible by colorful, non-commercial good looks of the opened cup. All labeling is confined to the lid, which can be whisked off with fingers alone; paperboard disk readily lifts out.



production unit which starts with a roll of coated foil at one end and discharges the gasketed, ready-for-use cups at the other end into their shipping cartons. It's all automatic. There is no hand operation or hand transfer anywhere in the process.

First, there had to be a suitable coating material and, secondly, there had to be a die design that could form the thin-walled cups without injuring the coated surface. Research developed the coating and engineers perfected the equipment that would insure a true hermetic seal, giving complete protection and yet being easy to open.

The cup design was developed with a conventional shoulder and a rolled bead top that would provide stability for automatic dispensing and capping, and with a surface to accommodate the flowed-in gasketing agent necessary for hermetic sealing. The gasketing agent had to be deposited on both the flat shoulder of the container and a portion of the "bead" side wall as well.

The cooperation of Kraft's own research laboratories made it possible for the container and the prototype equipment for dispensing, sealing and filling to bring Kraft Party Snacks rapidly to the test-marketing stage.

A prototype filling and sealing machine was good enough to give Kraft a 3,000-per-hr. production rate in the first packaging runs of the Neufchatel cheese blends, with all output channeled into the six test cities. Since then, Kraft engineers at the company's nearby Evanston, Ill., mechanical research facilities have produced filling and capping equipment which has a much greater hourly production capacity, although it follows the essential pattern developed on the prototype equipment.

The cups are dropped, one by one, onto a conveyor belt which moves them up to and under forced metered fillers. The foil-backed cardboard lid is applied to the cup shoulder. At the final two stations, the filled and sealed containers have their cover caps applied and crimped. The finished product is packed six to a carton, four dozen to the shipping carton.

The aluminum potential of the ribbed-foil cup in the food business generally appears so promising to the supplier company that it has developed similar cups in various degrees of hardness above the soft foil containers used by Kraft. The company is handling both the engineering and construction of machinery and dies for the containers at its own plant and has also created dispensing, capping and sealing equipment that can be integrated to existing filler equipment. The ribbed design is being kept throughout this particular container line, not only because of its appearance factor, but because the ribbing adds materially to the rigidity of the cup.



Components of the package. Pencil points to waxy gasketing material to which the plain under side of the paperboard disk, covered with waxed glassine, is sealed during the crimping on of the printed foil lid. Directions for opening the package are printed on the top surface of the disk.

Finally, the material lightness of aluminum as a shipping-cost asset is enhanced by the fact that the tapered cups nest easily for shipment.

The Kraft Party Snacks package is an outstanding example of logical, systematic research and development carried on simultaneously by the raw-materials supplier, package manufacturer and food processor.

Credits: "Ribfoil" cups and closures by Basca Mfg. Co., 2222 N. Olney St., Indianapolis 18, using color-lacquered aluminum foil by Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19.

The six flavors and, in background, the carton in which they are shipped by half-dozen. Kraft has been hard put to meet demand for these conveniently packaged new hors d'oeuvres spreads, just now reaching national distribution.





New rotary machine applies labels to Lea & Perrins bottles in continuous motion. Note variable-pitched feed screw, moving bottles from right to left. At far end of labeler is built-in accumulating table that feeds three 40-per-minute overwrapping lines. Operator is shown adding a supply of labels to the magazine.

Non-stop label gluing

Lea & Perrins' machine uses new rotary, screw-feed principle with circulating glue system and accumulates bottles fast enough to supply three overwrapping machines

A new type of labeling machine, which uses continuous motion to apply glued labels to round bottles at high speeds, is now being operated by Lea & Perrins, Inc., New York, manufacturers of bottled Worcestershire sauce. Rotary, non-stop action of this type is familiar on thermoplastic labelers, but the Lea & Perrins machine is one of the first to adopt this method of application for conventional glued-on paper labels.

In this day of ever more diversified, multi-product food-manufacturing giants, Lea & Perrins is quite unusual: It turns out a single product, "the original" Worcestershire sauce. And, except for a relatively small amount packed in a larger size for institutional users, this product is put up in a single package: a glass-stoppered 5-oz. bottle with an unusual paper overwrap, the neck part of which is perforated for removal prior to use.

This means that Lea & Perrins' entire packaging operation can be hand tailored for filling, labeling

and wrapping this one container in the most efficient possible manner.

The most important stage in this packaging operation is that in which the bottles are wrapped in the Lea & Perrins trademark—a printed paper covering which encloses the bottle completely, then is sealed at top and bottom and secured with a gummed band. Three specially designed machines do this job entirely automatically, but, because of their complex operation, their speed is necessarily rather limited.

Since each of the machines can be run at about 60 bottles per minute, Lea & Perrins felt that it would be most efficient to feed all three from a single labeler.

But there lay the problem. For years, the company's bottles had used two glued paper labels, a large orange one on the front, a smaller one bearing special promotional copy on the back. To apply these labels fast enough, two conventional labeling machines would be needed.

So, since it did not want to switch to a more expensive label, Lea & Perrins found itself stymied—until the development of this constant-motion labeling machine. This machine handles conventional glued labels, yet can be operated at a speed that is fast enough to feed the three slow-paced wrapping machines easily.

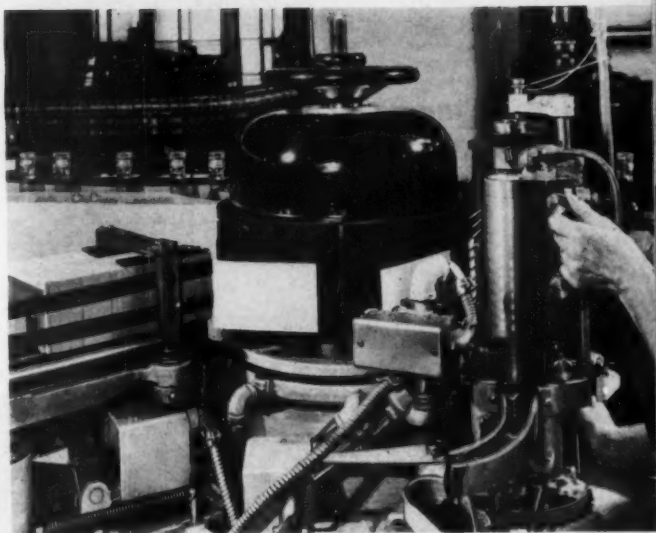
The labeler has other advantages. It takes up much less space than the two machines it has replaced. It has a built-in rotary accumulating table for labeled bottles, which is a great help in getting a smooth feed from this one labeler into three branch lines. And it has a novel glue feed, featuring a pump-operated system to re-circulate the glue onto a vertical glue-applicator roll.

Bottles enter the new labeler on a conveyor, one against the other, and are spaced at the proper interval by means of a feed screw with gradually increasing pitch. The labeler itself is built around a large suction cylinder. On one side of this cylinder is a magazine holding a stack of labels, which oscillates back and forth in a horizontal plane.

During this oscillation, the magazine moves momentarily in the direction the suction cylinder is rotating and at the same speed. When this occurs, the magazine moves against the cylinder and a label is transferred to the cylinder, which moves it past the glue roll, then into contact with a bottle. The bottle is forced against the label and, as this happens, a timed vacuum release cuts off the suction which has been holding the label onto the revolving cylinder.

There is a no-bottle, no-label device controlled by a solenoid arm placed along the screw feed and another solenoid which controls the application of glue. This device is operated by the presence of

Traditional bottle for Lea & Perrins Worcestershire sauce features trade-marked over-all paper wrap. Removing wrap discloses bottle label, which is now made in one piece instead of two, to permit use of new high-speed labeler.



Label pick-up is from an oscillating magazine (left) to a large revolving suction cylinder which carries the label past the vertical glue roller (right) and onto bottle. Compression section (left background) firms the label on bottle. Recirculating glue system (note the return flow at lower right) minimizes glue-consistency problems.

a label which is in position to receive the glue.

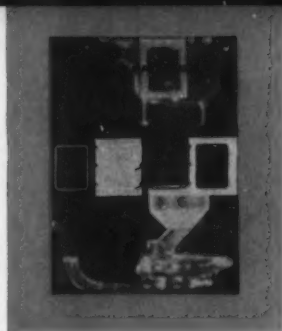
Once it has made contact with a glued label, the bottle is revolved between a running belt and a fixed opposing wall, with the pressure of these two firmly securing the label onto the bottle. This done, the bottles move via conveyor onto the rotary accumulating table, from which point branch out the three lines to the overwrapping machines.

Glue feeds onto the vertical roller from above and flows down by gravity, with the overflow going out a trough and back to the original reservoir to be re-circulated by a pump. This system is said to reduce variation in glue consistency, since it eliminates the milling of adhesive between two rollers and minimizes the amount of evaporation caused by excessive agitation. The single glue roll applies horizontal strips of glue to each label as it passes by.

To make possible the use of this rotary labeler, Lea & Perrins had to make a slight change in its traditional label. The back and front panels, previously separate, were joined together at one side to produce a single label, which wraps almost all the way around the bottle. But, aside from this, nothing is changed and Lea & Perrins' familiar bottle is being labeled more quickly and more efficiently than ever before.

Credits: "Pony 165" automatic labeler by New Jersey Machine Corp., 16 St. & Willow Ave., Hoboken, N. J. Labels by William W. Fitzhugh, Inc., 200 Fifth Ave., New York 10. Bottles by Anchor Hocking Glass Corp., Lancaster, Ohio, and Owens-Illinois Glass Co., Toledo 1, Ohio.

Industry
Survey



Institutional



Familiar package faces today go right to restaurant and hotel kitchens. Here Chef Anthony Szabo of General Foods' employee dining room, White Plains, N. Y., is shown with consumer sizes of popular GF packages and their big brothers designed for institutional use with same brand identity.

One of the big questions currently engaging the attention of the entire food industry is how best, through packaging, to capitalize upon the fast-growing eat-away-from-home market.

For years the packaging of food products for sale to restaurants, hotels and other eating-out places has been secondary to the effort put on packaging of brands to woo the housewife at the retail level.

Not so today. Rapidly, during the last two or three years, food processors have become keenly aware of a packaging approach to the vast food-service-industry market, whose sales today are esti-

mated at \$17 billion annually. This is rated the country's fourth largest industry, according to the National Restaurant Assn.—ranking ahead of such giants as petroleum and public utilities, and actually surpassing in dollar volume the total amount spent in a year on new and old cars.

Americans today are eating, on the average, one meal out of four *outside* the home—in restaurants, hotels, factory and school cafeterias, drug stores, roadside drive-ins, airplanes, trains, Armed Service mess halls and hospitals. An estimated 120 million meals are served every day in such eating places.

The worker's dinner pail has virtually been out-

foods

*Food companies are aware today that
convenience, economy and brand promotion in packaging
are as important
in the \$17-billion eat-out industry
as in the grocery store*

moded by the factory lunch room. With the increasing use of automobiles, we have become a nation on wheels, but we must stop periodically to eat. The roadside diner and drive-in thus have become big new segments of the public-feeding industry.

The food trade calls "eating out" the "institutional market." And with every food processor making a pitch for sales to the 540,000 hotels, restaurants and other eating places, there is urgent need for the packaging of foods that save time and labor costs in preparation. The effect of all this is a steadily increasing flow to restaurant kitchens of quick-to-prepare convenience foods, specialty items and individual-service packages—the latter often going right to the table in the package.

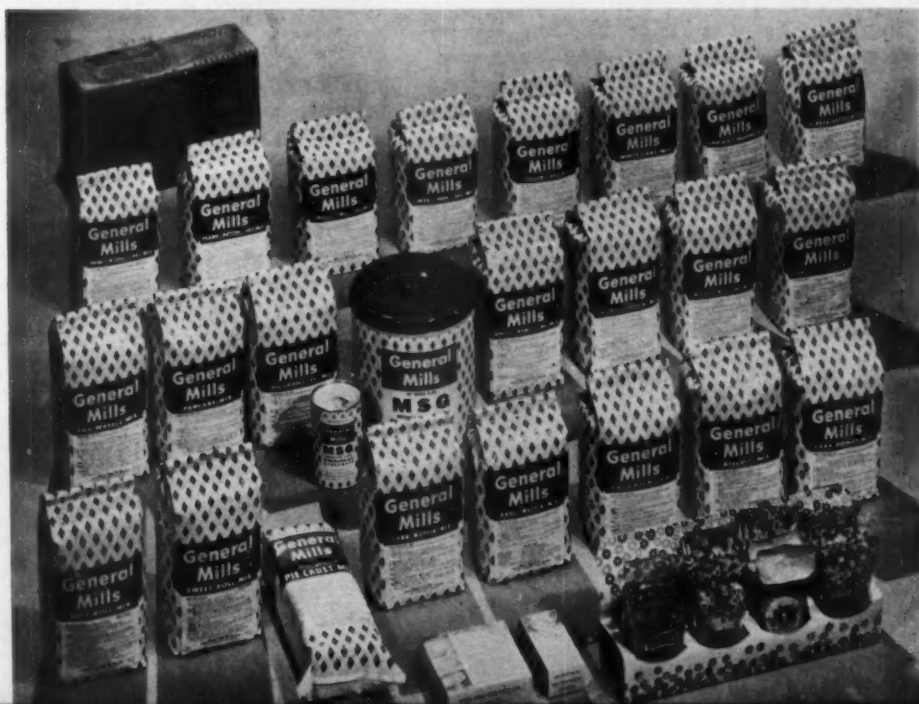
Much progress is being made, but competition is getting tougher with major food companies hereto-

fore concentrating on the consumer market, such as General Foods, General Mills, Pillsbury, Nestle and Stokely-Van Camp, setting up separate institutional divisions and firms like Kraft, Minute Maid, American Home Products, Standard Brands, Borden, Armour, Swift, Quaker Oats and others putting extra effort on this type of business. The company that can offer, among other things, the greatest convenience in packaging will definitely have the edge on the others.

With restaurant men plagued on all sides by mounting labor costs, there is genuine interest in the convenience of cartons, cans, bottles, plastics and film packages that help to reduce the high cost of overhead.

According to John Ruffley, assistant director of research of the National Restaurant Assn., product

Uniform family identity has been established for the complete line of General Mills institutional products through a bright red diamond design against a white background—and bold use of the company name. More than 2,000 varieties of baked foods may be prepared from these products. Within a period of only 18 months, the company says, the packages have established quick recognition.





Advertising campaigns are backing up brand-name institutional-food sales programs. Kellogg has been featuring "eating breakfast out" in ads which depict its handy single-service cartons of cereals.

acceptance by the restaurateur boils down to how well the food service industries can:

1. Furnish the restaurant man with the most acceptable form of product.
2. Make it convenient for him to use.
3. Educate the restaurant man and the public in the greater use of the product.

In the specifics of packaging, this means (1) containers which give adequate protection to the product; (2) proper-sized packages; (3) complete and easy-to-follow preparation directions; (4) stronger brand identity for the institutional package;

- (5) unitizing for portion control wherever this is feasible; (6) increased use of the single-service package wherever it will save time and labor, and (7) package convenience features that aid in preparation, such as properly pre-measured batch quantities or easy-to-use composite packages for ingredients that must be mixed together.

Package sizes

First consideration, perhaps, is package size. Selling to the institutional field no longer means merely supplying bulk sizes for quantity cooking, which

Single-service portions of Kraft's ketchup, jams and jellies in formed vinyl containers represent one of the most striking developments for mass-feeding operations and an outstanding use of volume plastic packaging.





Component packaging offers new convenience in the restaurant kitchen. Heinz 20-oz. can of pre-cooked dehydrated chili beans contains packet of chili powder and spices right in the can for easy preparation with contents to make 3 qts. of chili con carne.

Convenience trend in institutional foods packaging is indicated by Kraft's Ribbon Slices of processed cheese with marks on wrap to show restaurateur how to make 64 $\frac{3}{4}$ -oz. cheeseburger slices with three cuts on red lines or 48 1-oz. sandwich slices with two cuts on blue lines.



heretofore has been an accepted conception. Nor does it mean merely shipping cases of regular consumer sizes to the restaurant trade, as some food processors have done in the past. The whole question of package sizes for institutional use must be related to the product and users' needs. Packages that are too small, particularly cans, may be found to create an annoying problem of can opening and disposal. Sizes that are too large may create food waste and a storage problem. There is no set rule for size. Package quantities must be determined for each product in accordance with how and where the product is used.

Some firms find it advisable to offer several sizes to meet all requirements. Soups, for instance, may be offered in as large as 51-oz. chef sizes of concentrates down to the cans suitable for individual servings by heating in the push-button electric timers now offered by the soup companies for counter orders.

Preparation information

With mass feeders, like housewives, showing increasingly greater interest in convenience foods, such as cake and cookie mixes, prepared pie crusts, etc., it is imperative that food processors give complete directions for preparation on the package, together with estimated yields.

Leading firms in this field today are setting up their own institutional test kitchens where the recipes are tested and batch quantities established as guides to restaurant planning and cost accounting. These tests can provide the sound preparation information on the package that wins and holds customers today. Test kitchens can develop helpful new recipes to be made with the products that will

keep users coming back for more. Sometimes these recipes are offered as printed literature with the mixes. But often they may be printed right on the package, the same as on consumer packages.

The responsibility of the test kitchen in working up the directions and recipes which go on the package cannot be overemphasized. If a restaurant-owner's customers like the dish prepared from the packaged product, he is more likely to purchase the product again. If he sees too much of what he has prepared from a certain manufacturer's product thrown away, he is not likely to continue using that manufacturer's brand.

Brand identity

As important to the acceptance of an institutional product as to consumer foods is brand reputation. That is why leading processors are giving every attention to institutional packages with strongly identified brand.

When General Mills created its Institutional Products Div. in 1954 and moved into the "eat-away-from-home" market, the company created distinctive packaging—both designwise and functionally—for products developed especially for the hotel, restaurant and institutional field.

The institutional packages are characterized by strong emphasis on company name and a diamond-shaped device printed in red against a white background. There are more than 30 special basic General Mills products from which more than 2,000 varieties of baked foods may be prepared.

The product line consists of eight different cake mixes; three enriched yeast-raised mixes from which an unlimited variety of rolls and pastries can be prepared; seven enriched hotbread, muffin and



Polyethylene-coated paper gives moisture protection to new single-service packets of C & H sugar, reportedly eliminating former troublesome caking. Improved package protection is aim of all food firms who sell to the institutional field.

donut mixes; three enriched griddle mixes; homogenized pie-crust mixes; four ready-to-eat cereals, and four new cookie mixes.

Baking mixes are packaged for the institutional field in 5-, 25- and 100-lb. bags. The homogenized pie crust, which requires no refrigeration, is wrapped in 4-lb. blocks. The cereals—Wheaties, Cheerios, Corn Kix and Sugar Jets—come in cases of single-serving, 1-oz. transparent envelopes packed in a colorful restaurant display rack.

Ralph E. Gaylord, institutional products division general manager, says that in a year and a half, the bright, fresh appeal of the red diamond design has established quick family identification of all General Mills institutional products. The prominence of the company name quickly associates each of the institutional products with the thorough research and testing and dependable technical and merchandising service on which the company has built its enviable reputation in the grocery and flour fields.

Portion control

A term much discussed today in the institutional food field is "portion control." It designates the method of controlling individual servings in uniform quantities. Much progress is being made in this direction, particularly in the field of meat, fish and poultry, by pre-cutting and packaging in an effort to assure each customer an equal serving, not, say, 3½ oz. of Swiss steak to one customer and a 6-oz. portion to another. The procedure not only

makes happier customers but cost-accounting and serving much easier for the restaurant operator.

Restaurateurs are learning that labor purchased in prepared-food packages generally costs less than the same labor costs in their own kitchens. Packers on the other hand have been quick to offer this new pre-cut and packaged service to their customers.

Hams, for example, may be divided and boxed in (1) center slices, (2) ham chunks and (3) the remainder in bones and fat. Labor time required to prepare ham chunks, popular in a variety of menu items, may be saved by purchasing the chunks packaged from a volume producer.

Loin steaks may be purchased boxed in uniform cuts as the result of a long line of prefabrication steps in the packing plant, in which other parts of the beef carcasses are prepared and sold in other packaged units. The same goes for chuck-rolled roasts and other cuts that save time, please the customer and save labor in the eating establishment. Veal cutlets, fish fillets, boned chicken, chicken breasts and many other packing-house and fishery products, both fresh and frozen, are now supplied in this manner, packaged for the restaurant trade.

The dairy field is packing butter in pre-cut pats that are ready to serve on opening.

The paper cup of specific capacity has aided greatly in portion control for servings in factory and school lunch rooms. These portion cups and paper containers offer one of the most certain methods of controlling portions by volume. The size of

Printed cellophane wrap for 24-count package of rolls, says Superior Roll Co., gets company's name on display in roadside stands, restaurants and other institutional eating places where these rolls are served. Institutional package helps immensely in building up a company's reputation for high-quality baked goods.



the cup or container selected easily determines the quantity of food to be served and is easy for the worker to measure out visually.

Single-service packages

Among the most helpful aids to mass-feeding operations are the efficient unit packages designed for just a single serving. They assure a clean, sanitary product, cut waste, simplify inventory, save labor and preparation time. At the same time they have provided the food manufacturer with a new way to get his brand name right to the table where the product is used.

Among the first, of course, were the individually wrapped tablets and paper envelopes of measured quantities of sugar. Familiar, too, for years have been the individual cartons for breakfast cereals and the many types of individually packaged units of milk, cream and ice cream.

A spectacular development of recent years is the formed vinyl plastic container adopted by Kraft for a whole line of institutional, single-service units of jams and jellies, ketchup and table syrup now widely used in restaurants, hotels, dining cars, airlines and industrial cafeterias.

Table sauces, jellies and condiments may also be packaged today in automatically formed and filled individual packets of such flexible materials as cellophane-polyethylene combinations, saran and foil laminations. Popular recent newcomers, used widely on the airlines, are the acetate-foil-Pliofilm packets of soluble powdered-cream products, each containing just enough to empty into a cup of tea or coffee. Individual flexible packages for single services of frozen fruit-juice concentrates have also been used as handy aids at soda fountains.

One of the biggest opportunities for the individual-serving packet has developed in the beverage field. Nearly every processor of soluble coffee and cocoa mixes has adopted the single-service packaging idea to provide just enough of the product for one cup when combined with hot water. Latest product in such individual-service packages in the beverage field is Nestle's instant Nestea, now used widely in the 500-unit Howard Johnson chain.

The baking industry has found a ready sale to the institutional field for its individual, film-wrapped packages of crackers and cookies, and now bread bakers are studying various types of films for the possibility of offering just two slices of bread in a package as a means for giving longer shelf life to bread and thereby providing another opportunity for savings to the mass-feeding operator.

The problem of serving salt and pepper has been solved in many commercial eating operations by the little single-service, throw-away packages, of several

types, containing just enough for use at one meal.

Noted also is a trend toward more canned prepared foods, such as soups, baked beans, chili con carne, Chinese dishes, etc., in single-service cans for short orders.

Package conveniences

As the competition in the institutional field becomes keener, processors are on the lookout for package constructions and forms that offer more convenience. The trend is already evident in such packages as Kraft's Ribbon Slices of cheese, which come in a wrap so printed with markings that three

PHOTO COURTESY INSTITUTIONS MAGAZINE



Pre-cutting and packaging of meats assure more uniform serving and facilitate cost accounting and handling for restaurateur. Pfaelzer Bros., Inc., Chicago, divides and packages hams into center slices, chunks, and bones and fat.

knife cuts on the red lines of the package provide 64 $\frac{3}{4}$ -oz. cheeseburger slices—or with two knife cuts on blue lines, 48 1-oz. sandwich slices.

The convenience of the component-package idea is noted in a 20-oz. tin of pre-cooked dehydrated chili beans which Heinz packages with a packet of chili powder and spices, included right in the can, containing just enough for preparing with the contents of the can 3 qts. of real chili.

A number of big food companies are backing up their packaged institutional-food sales programs with a cooperative advertising campaign reported to total more than \$4 million [Continued on page 247]

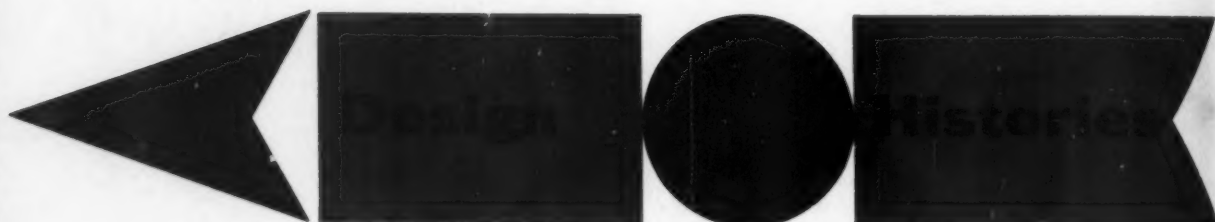


Stronger-branded candies

To meet the increasingly competitive conditions in today's supermarkets, Blumenthal Bros. has redesigned the cartons for four of its chocolate-covered candy products. Keynote of the new designs is a completely restyled trademark, which features a pair of capital B's (for the company's initials) studded with four dark-brown dots to give a domino-like effect. With its background of bright pink, the trademark's over-all appearance resembles that of a bull's eye. It now is used on all Blumenthal's packaging, shipping cases, advertising, stationery, trucks, etc.

The four cartons illustrated here, which comprise the company's new "designer line," include 29-cent packs of Sno-Caps, Goobers, Raisinets and Malties. A die-cut window gives a view of the contents through both top and front edge, and the new trademark appears on five sides.

Credits: Cartons by Chicago Carton Co., 4200 S. Crawford Ave., Chicago 32. Designs by Frank Gianninoto & Associates, 133 E. 54 St., New York 22.



Transparent inks give iridescence to coffee cans



Breaking away from the usual run of conventional opaque colors on metal coffee cans, H. H. Hixson & Co. is now using a container lithographed with transparent inks to produce an iridescent metallic-ink coloring. Although this type of imprinting has been used on metal cans for other types of products, particularly beer, this is reported to be its first application in the coffee industry. Transparent ink is imprinted on the bare metal to give a glowing magenta-pink color, which serves as a background for opaque white lettering.

Without any special promotion, sales produced by the new container have been remarkable, says Hixson. Introduced at first on the company's 2-lb. vacuum-packed can, the new color effect was an instant success. Ordinarily, the 2-lb. size is in a one-to-five minority, compared with the regular 1-lb. container. However, with the new redesigned package, Hixson found both sizes selling in almost equal proportion. Naturally, the new lithography now appears on the 1-lb. cans, too.

Credit: Cans by American Can Co., 100 Park Ave., New York 17.

Polyethylene-lined pails for ice-cream cherries

The standard method of shipping cherries to manufacturers of ice cream has been to pack the fruit in 55-gal. steel drums, which, when filled, weigh more than 600 lbs. apiece. This practice has many disadvantages: the drums are awkward to handle and store; there is danger of contamination once a container has been opened; smaller users do not want such a large quantity of cherries at one time. To solve all these problems, Howard Black Cherry Co. has begun to use an entirely different type of container, a brightly colored 5-gal. metal pail with polyethylene liner.

The pails are lithographed in four colors, with cherry red the dominant hue, supported by white, green and brown. All lettering except "Sweet Native," the brand name, is in white. Red cherries have a red lid, black cherries have a black one and green cherries a green one.

Credits: Pails by Continental Can Co., 100 E. 42 St., New York 17. Liners by Winzen Research, Inc., 8401 Lyndale Ave. S., Minneapolis 20, Minn. Design by Duane Swibold, Saginaw, Mich.



Design

Histories

Sparkling flecks highlight cigarette-lighter boxes

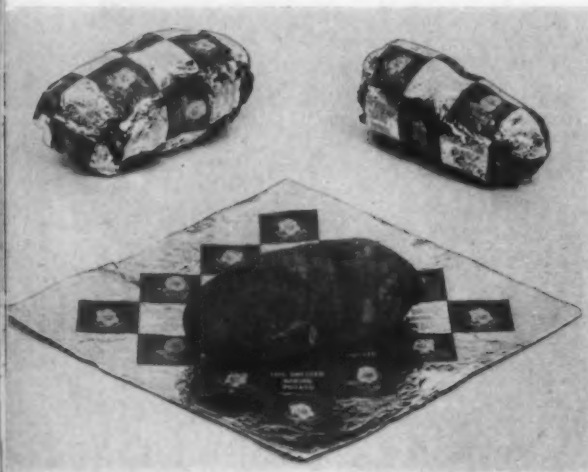
Tiny dots of colored foil, sprinkled at random on the covers of two new set-up boxes now used for Kreisler cigarette lighters, are designed to catch light reflections—and the attention of customers. The bits of foil are set against a background of blue-gray velour paper, which is also used to cover the bottom sections of the containers.

The new packages are used for two sizes of lighter. For larger table lighters, the box (left) has a lift-off cover and a display base covered with gold pyroxylin paper and a "shocking pink" pillow. A matching ribbon band stamped in gold leaf highlights the name, "Colibri by Kreisler." Smaller containers, for pocket lighters, feature an unusual "jack-in-the-box" device. A small plastic sponge, set under the hinged display tray, is compressed when the slanted cover is closed. When the cover is opened, the sponge tilts the tray forward. A die-cut well holds the lighter, which is pillowed by light blue satin.

Credit: Set-up boxes by Dennison Mfg. Co., Framingham, Mass.



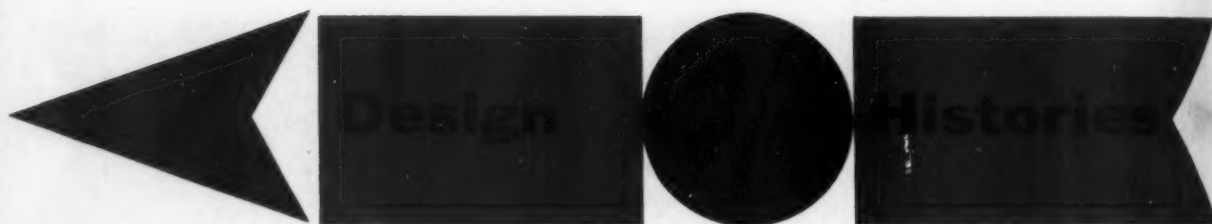
Foil wrappers dress up baking potatoes



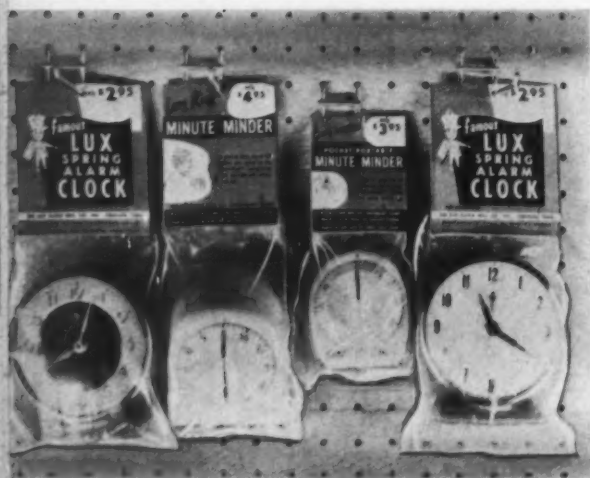
When Sanders-McKee Potato Chip Co. found itself with a quantity of potatoes on hand that were too large for converting into potato chips, the company decided to go into the baking-potato business. And, to enhance the appearance of the giant spuds, they were scrubbed and wrapped in sheets of printed aluminum foil. The foil is designed to be left on while its contents are baked. After removal of the potatoes from the oven, they can be served in the same wrappers.

Each wrapper is a sheet of foil 10 in. square, printed in a checkerboard design in orange and yellow. Alternating inside the squares are illustrations of a potato being scrubbed, dressed and served with butter, salt and pepper—plus copy reading "foil dressed baking potato." The potatoes are currently being sold only to institutional users, but Sanders-McKee is planning direct selling through grocery outlets.

Credits: Printed wraps by Milprint, Inc., 4200 N. Holton St., Milwaukee 11, Wis., using aluminum foil by Aluminum Co. of America, Alcoa Bldg., Pittsburgh 19, Pa.



Clocks and timers packaged for rack display



Latest group of products to adopt the polyethylene bag as a protective, visible package is Lux Clock Mfg. Co.'s line of spring-alarm clocks and "Minute Minder" timing devices. With an eye on the increasing trend toward self service in variety, hardware and drug stores—plus the increasing sales of non-food products such as clocks in supermarkets—Lux decided it was time to switch away from the conventional folding carton. A consumer preference survey recently made by Lux reportedly indicates that there is a definite demand for this new type of package.

Each clock is now packed in a sturdy polyethylene bag which is fastened at the top by an over-sized header card, on which descriptive copy, instructions and price are printed. A metal grommet on each card gives extra hanging strength, so that the new packages may be hung from display racks. The pack is also adaptable to display in bins or on shelves.

Credits: Polyethylene bags by Shore Line Industries, Clinton, Conn. Display cards by T. B. Simonds, Hartford, Conn.

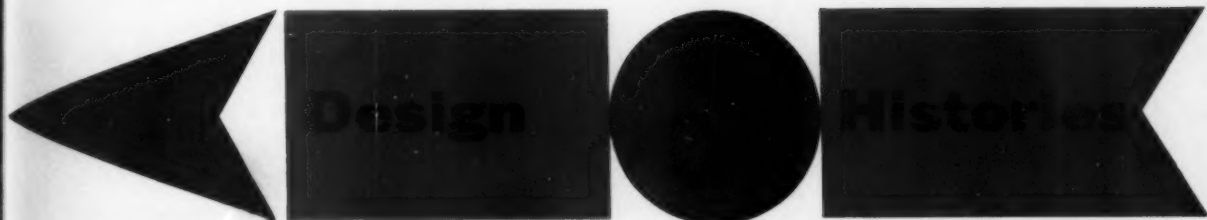
Famous cartoonists sketch beer-can decorations

Six new carton designs—each the product of one of the country's best-known cartoonists—have been introduced on the cans used for Sicks Seattle Brewing & Malting Co.'s Rainier beer. The cartoons are lithographed in color directly onto the backs of the conventional metal beer cans and feature such topical subjects as golf, patio cookery and the "do-it-yourself" fad. One of the designs features Rainier's television commercial character, The Little Dutchman.

Known as Jubilee Cartoon cans, the containers are being backed up by an extensive advertising and promotional barrage throughout Rainier's sales area in the Pacific Northwest, based around the theme, "The cartoons are here! There's even more life to Rainier!"

The six artists who were commissioned to turn out the unusual beer-can designs are Virgil Partch, William Steig, Irwin Caplan, Robert Osborn, Bob Cram and Ray Patin.

Credit: Lithographed metal cans by American Can Co., 100 Park Ave., New York 17.



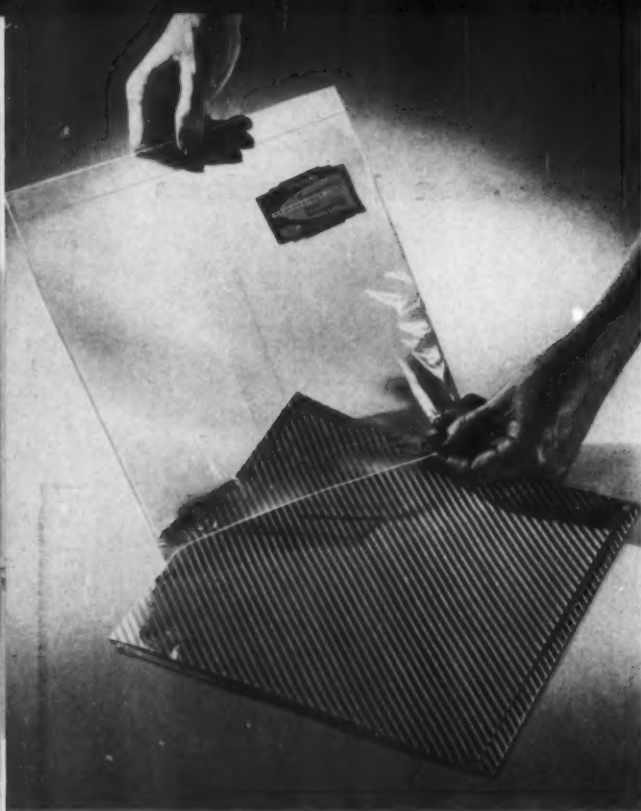
Liquid pancake batter pours out of 'milk' cartons

Still another product aimed at making things just a little easier for the housewife is "Batter Up," a new liquid pancake batter introduced by C&C Super Foods Div. of Cantrell & Cochrane Corp. The batter is complete, with nothing to be added or mixed. All the user has to do is grease her griddle, heat it, shake the container of batter and pour it on. Under refrigeration, the batter is said to last three weeks.

After experimenting with other types of containers, C&C selected a flat-top, pint-size, milk-style carton made from wax-coated paperboard. This, the company felt, would help denote freshness and fit the product into the character of a dairy product. This is particularly important, since "Batter Up" is being distributed through regular dairy channels to supermarkets and current plans are for it to be delivered to homes by dairy route men. Test-market sales have already begun and national distribution is expected to start shortly.

Credit: Paperboard containers by American Can Co., 100 Park Ave., New York 17.





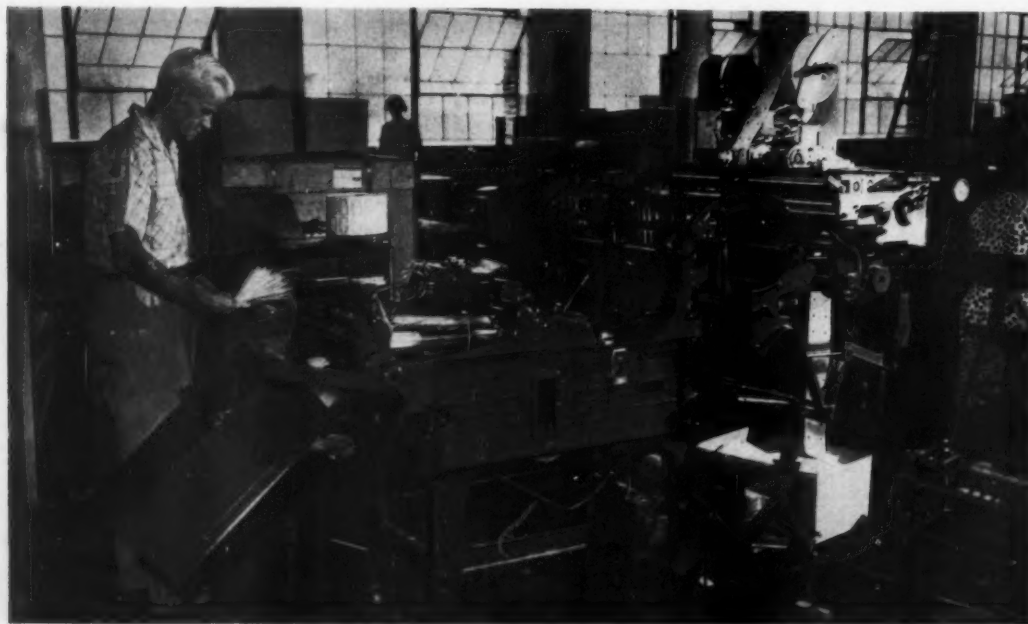
This is not a label, even though only the closest examination reveals that it isn't. Released onto inside of cellophane web before it is formed into a bag, the "label" is transferred from roll stock by unusual new printing method.

Printing by

A remarkable development in package printing—a process which ultimately may have applications throughout the entire realm of film, paper, plastic and metal containers—now has been officially unveiled.

This is what it is: a technique for identifying packages that combines the advantages of both printing and heat-sealed labeling. It is a type of transfer, not unlike decalcomania, except that no wetting is involved. Invented and developed by the Dennison Mfg. Co., the process is now being used for imprinting three-color labels on cellophane packages of Dennison gift-wrap papers.

Dennison calls the new technique "therimagraphy"—using a combination of heat and pressure to transfer a printed coating from a paper backing onto cellophane. Ink and paper together resemble ordinary roll labels very closely. But the resemblance is only superficial. The inked "label" is attached to its backing by means of an ingenious new chemical formulation and, when heat and pressure are applied in the right combination, the printed coating is separated from the paper and bonded securely to



Transfer mechanism (upper right) is attached to a standard transparent bag-making machine in the Dennison plant. Transfer labels on their paper backing feed in from the top; unprinted cellophane feeds from the bottom. After inked surface is affixed to the cellophane, bags are formed and removed by hand.

transfer: a new method

Dennison's new 'therimagraphy' combines printing and labeling, using heat, pressure and a special machine to transfer inked impressions from paper backing to cellophane

the surface of roll cellophane. Using a newly developed machine, these two operations are performed entirely automatically as the cellophane feeds into a transparent bag-making machine.

There should be no confusion about this: it is not a decalcomania; the finished product resembles nothing so much as rotogravure-printed cellophane, with colors that cannot be removed, even if you try to pull them off with pressure-sensitive tape.

The advantages of this system should be obvious. A packager can benefit from all the features of a full-color printed design for each product variety—with a full range of colors, flexibility of copy and a high-gloss appearance. Yet he does not have to worry about printed-film inventories; he stocks only plain or stock-design wrapping material and he is not limited by the shape or rigidity of the product he is packaging. And he does not have to worry about labels coming loose or being marred or scratched.

At the same time, he can utilize printed film's fast, automatic operation without running into its problems—having to pay the extra cost of printed cellophane when only a small segment of a package surface actually needs to be printed, needing to keep fairly large inventories of films with different copy.

To sum up: the new development appears to combine the attractiveness and durability of printing with the versatility and economy of roll labeling. For packagers in any number of fields this is a combination to be reckoned with.

Dennison intends to make the process available for use by others, including packagers, converters

Two stages in this novel printing process are illustrated here. Top two "labels" represent a section of roll stock which feeds into the transfer mechanism. Underneath them is a section of a typical Dennison bag, with printed coating removed from its paper backing and permanently bonded to the cellophane. Outer contours of this design are determined by shape of heated platen in transfer mechanism.

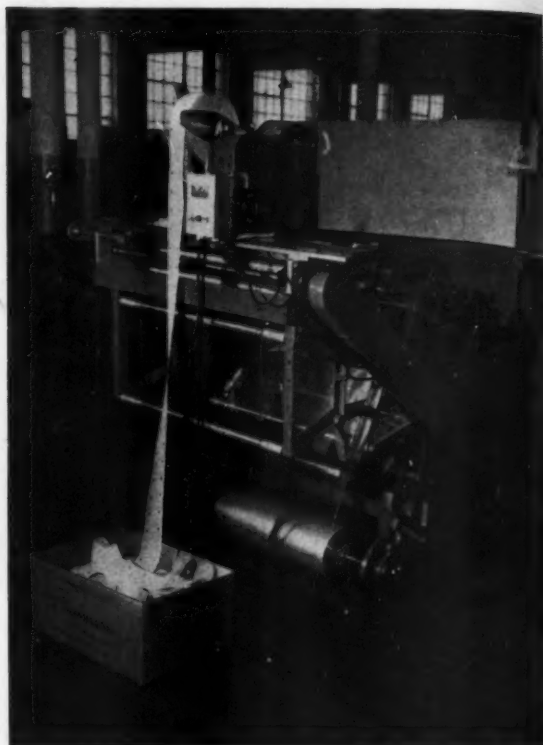
COURTESY DENNISON MFG. CO. AND ADOLPH GOTTSCHE, INC.





Key operation in transferring coating from paper to cellophane is shown in this close-up. Webs of coating-plus-paper (1) and unprinted cellophane (2) pass over a series of rollers and meet at (3). Here, revolving heated platen applies proper amount of pressure to remove printed coating from paper and affix it to cellophane. Following this, waste paper used for backing (4) is separated and discarded, while labeled cellophane web (5) moves on to bag-making section.

Rear view shows roll of unprinted cellophane at bottom of machine and discarded strip of backing paper.



and label printers. Several large converters are making plans to distribute the product.

First Dennison package to benefit from this new method of package identification is a simple heat-sealed cellophane envelope used for two sheets of 20-by-30-in. gift-wrapping paper. Up to now, the company has been attaching a rectangular heat-sealed paper label, measuring about $1\frac{3}{4}$ by $2\frac{3}{4}$ in., to the upper right-hand corner of each of these envelopes. This bears essential descriptive copy and the price.

At a first glance, the new "label" appears to be exactly the same. Actually, however, it is not a label, but a printed-coating impression, duplicating the original label in color and size, which has been transferred from its paper backing onto the inner surface of the cellophane.

One of the key factors in the perfection of this

new printed transfer system was the development of an automatic device which could be attached to all the most popular transparent wrapping and bag-making machines. This special device was designed especially for Dennison by a prominent imprinting-machine manufacturer.

Into the transfer mechanism two things are fed simultaneously: at the bottom, a roll of unprinted cellophane and, at the top, a roll of transfer "labels" consisting of a paper strip which has been covered first with a special chemical coating and then rotogravure printed with a three-color design.

The two webs feed through a series of rollers until they come parallel to each other. At this point both cellophane and paper are contacted by a revolving metal transfer roller, which is heated to from 350 to 500 deg. F. On this roller the actual contact is made by a platen which has been shaped

to fit the contours of the inked impression which is to be transferred.

The platen is set to apply a pressure approximating that of a conventional printing process. This, combined with the accompanying heat, is sufficient to release the printed coating immediately from the backing. As this is done, the paper backing is stripped away and discarded, but the label-like design remains permanently affixed to the web of cellophane.

The unusual formulation of the coating does the trick—it is so designed that heat and pressure cause it to separate itself from paper, yet tightly weld itself to cellophane.

After the web has been "printed" in this manner, it feeds into the body of a conventional transparent bag-making machine, which forms it into cellophane envelopes, open at one end. Later, these are filled by hand with gift-wrap paper and sealed.

The transfer mechanism, although coupled with the wrapping machine, is a separate piece of equipment, operating off its own built-in motor, but timed to the wrapping machine. Its action is continuous, but for the current Dennison installation this action has been converted to synchronize with the intermittent operation of the wrapping machine. The transfer-applicating machine is designed to be used with intermittent- or continuous-motion wrapping machines, or with other types of bundling or package-making equipment. A number of machinery manufacturers are now reported to be planning to incorporate the applicator in the web-feed sections of their machines.

Machine speeds of 120 or more impressions a minute are said to be possible, although, for the present Dennison is only working at a 40-a-minute rate. As production increases, this speed is expected to be doubled.

Placement of the imprint on the web is determined by simple adjustments of the packaging and transfer machines.

Label sizes from 1 by 1 up to 4 by 4 in. are said to be usable, with even larger sizes theoretically possible. However, one of the big economies in this new system occurs when the label occupies only a relatively small portion of a package's surface. Thus, Dennison feels that only when 15% or less of the film carries copy is the new technique most practical.

Another important advantage is in the making of copy changes. As long as the outer dimensions of the imprint are kept the same, changing copy is accomplished merely by changing rolls.

Currently, Dennison plans to use "therimagraphy" for identifying at least 12 million packages of the gift wraps turned out annually at its May-



Hand insertion of contents, two large folded sheets of gift-wrap paper, is done immediately following making of finished bags. With new technique, there is no inventory problem with labels; bags are imprinted from roll stock as needed.

nard, Mass., plant. But, remarkable as is this first application of a revolutionary new technique, the prospects for its future use [*Continued on page 253*]

Credits: "Therimage" transfer labels by Dennison Mfg. Co., Framingham, Mass. "Imagraph" transfer-applicating machine by Adolph Gottscho, Inc., Hillside, N. J. Transparent bag-making machine by Simplex Packaging Machinery, Inc., subsidiary of Food Machinery & Chemical Corp., 534 23 Ave., Oakland 6, Calif.

Typical assortment of new Dennison packages using the new marking method. Currently, the company plans to use at least 12 million of these envelopes in its Maynard, Mass., plant alone.



Economical molded pulp

Its possibilities for protection in shipping are now being explored in this country; Stop-Fire extinguishers provide an example of cushioning complex contours



Suspended in recesses of three pieces of low-cost molded pulp, this fire extinguisher—filled with carbon tetrachloride at 180 p.s.i.—is protected from shipment impacts that might cause damaging leaks. As may be seen in base section, blocks are roughly contoured on under side as well, to save material.

Molded pulp has, until recently, received surprisingly little attention in America, either as an industrial package form or as an interior packaging material. Although it has long been popular with European companies, particularly in Great Britain and Germany, molded pulp is just now beginning to be seriously regarded in this country. It may be significant that two large package-supplying companies* have announced their entry into this field just within the last few months.

There are many possible uses of pulp specially molded to conform to the contours of irregular or complicated products which need a fairly high degree of protection during shipment. It is low in cost, light in weight and can reduce the labor involved in assembling packages.

A typical user of this new method is Stop-Fire, Inc., New Brunswick, N. J., which has introduced corrugated cartons with three-piece molded-pulp interior supports for its fire extinguishers.

Packaging for shipment has always been a particularly critical task for fire-extinguisher manufacturers. A leak during shipment could cause

serious damage. And since extinguishers usually are set in place on a wall and virtually ignored for long periods of time, it is essential that they be carefully protected from later development of the tiniest leak or imperfection—something which might, over a long period of inaction, make the extinguisher lose its effectiveness.

Stop-Fire has discovered that molded-pulp inserts can efficiently provide this protection.

Before adopting its molded-pulp container, Stop-Fire used a conventional packaging technique: an outer container of heavy corrugated and interior supports made from six or seven additional sheets of corrugated material folded to fit around and support the cylindrical extinguisher.

The new interior suspension device is simplicity itself. It consists of three pieces of molded-pulp material, two of them designed to lock together snugly around the irregularly shaped pressure gauge and handle at one end of the fire extinguisher, a third fitting around its flat base. The three pulp sections are custom molded to lock the extinguisher securely inside its outer carton, yet leave some air space around the wall of the metal

*Bemis Bro. Bag Co., St. Louis, and Arvey Corp., Chicago.



Shipping carton of corrugated needs no other fittings. Formerly, folded, die-cut corrugated fittings were used. This way, the packaging operation is reduced from 12 motions to only four.

cylinder, a point where protection is not needed.

The package is designed throughout to make the most economical use of material. As long as suspension is provided at critical points, it is not necessary to fill the entire void with solid molded pulp. The inserts are not solid blocks, but more like shells, shaped to fit the contours of the extinguisher at top and bottom, but hollowed within.

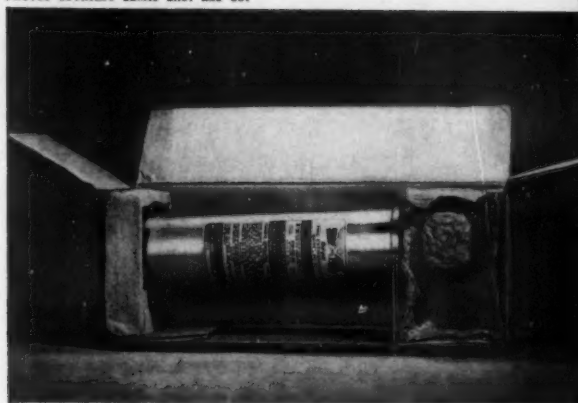
The molded-pulp supports are inexpensive—Stop-Fire estimates that they cost about one cent less per package than the corrugated ones did—but that is a minor consideration, according to the company. Tests have shown that they give better, more fool-proof shock resistance. And they take up less storage space before being inserted.

But best of all, Stop-Fire feels, is the way they simplify the packaging process. Before, each of the series of corrugated inserts had to be separately folded by hand along scored lines and then fitted into the outer carton. Now, folding is eliminated and the packaging job consists merely of clapping the three pieces of molded pulp around the fire extinguisher and inserting it into its carton. A task which formerly required 12 separate assembly movements is now estimated to take only four, with a saving in labor cost of approximately 20%.

Stop-Fire is using the new protective package in three sizes, designed to fit its 1-, 1½- and 2½-qt. hand fire extinguishers, which use carbon tetrachloride under a pressure of 150 to 180 lbs. The company plans shortly to introduce similar packages for its entire line of extinguishers.

Credit: Molded pulp inserts by Tekmold Products Div., Bemis Bro. Bag Co., 1200 Chestnut Ave. N., Minneapolis 3, Minn.

PHOTOS COURTESY BEMIS BRO. BAG CO.



Cut-away side section of container shows how head-fitting block is hollowed on the under side.



Two of three sizes currently being used by Stop-Fire, packed ready for shipment. Discharge handle is recessed below the level of the two top blocks to prevent accidental pressure.

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4



5

Modern

Packaging

Pageant

- 1 Neck bands on Heinz Chili Sauce bottles now carry a recipe for Russian dressing, the first in a series planned by H. J. Heinz Co. Bottles, Anchor Hocking Glass Co., Lancaster, Pa.; Owens-Illinois Glass Co., Toledo; Hazel-Atlas Glass Co., Wheeling, W. Va. Neck bands, Nevins Co., Clifton, N. J.; Lehmann Printing & Lithographing Co., San Francisco.
- 2 Russell Spruance Co.'s new Old Fashioned Bread Mix comes in a duplex bag lined with laminated glassine. Bag, Riegel Paper Corp., New York. Weigher-filler, U. S. Automatic Box Machinery Co., Boston.
- 3 TV Time Foods' new line of soft-drink mixes is put up in laminated-foil packets, gravure printed in five colors with an over lacquer. "Metalam" package, The Dobeckmun Co., Cleveland, Ohio.

- 4 A new growing medium for soil-less cultivation is put up by World Vermiculite, Ltd., in a ready-to-use seed box. Resin-bonded fibre tray base holds vermiculite in cellophane bag, plant food in film envelope. Bag, Colodense, Ltd., Bristol, England. Cellophane, British Cellophane, Ltd., London. Tray, Witchampton Paper Mills, Wimbourne, England.
- 5 Miricil Chemical Co. provides instructions for use of its new medicated hand cream on a die-cut paperboard insert fitted lengthwise over tube and locked around cap. Tube is then put in a folding carton and six packed in an outer carton. Cartons, Thames River Div., Robert Gair Co., New York.
- 6 Gift appeal is achieved for Robert Pacific's Seven Seas spices and seasonings with graceful glass jars packed in sets of four and eight in paperboard



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Modern Packaging Pageant

boxes. Glass, Glass Containers Corp., Hayward, Calif. Caps, Crown Cork & Seal Co., Baltimore, Md. Labels, H. S. Crocker Co., San Bruno, Calif. Boxes, Acme Paper Box Co., San Francisco.

- 7** Aluminum foil bags printed in red, yellow and blue, with the Crispy Kid trademark, create distinctive packages for Arizona Food Products Co.'s three Crispys brand of potato chips—Regular, Barbecue and Bleu Cheese. Bags, Western Waxed Paper Div., Crown Zellerbach Corp., San Leandro, Calif.

- 8** Tapered contour of this new 16-oz. private-mold bottle for Corn Products Refining Co.'s NuSoft rinse-fabric softener makes for easy handling. Straight-sided white plastic closure permits automatic hopping during filling. Bottle and closure, Owens-Illinois Glass Co., Toledo, Ohio.

- 9** Frosty-looking orange-colored ceramic coating fused on the outside surface of the glass bottle for Montebello Liquors' "Orange Driver" hot-weather drink creates the appearance of being chilled. Cut-away corrugated carton is used for display. Bottles and metal screw caps, Armstrong Cork Co., Lancaster, Pa. Cel-O-Seal bands E. I. du Pont de Nemours & Co., Inc., Wilmington, Del. Labels, Adcrafters, Inc., Baltimore. Carton, Hinde & Dauch, Sandusky, Ohio.

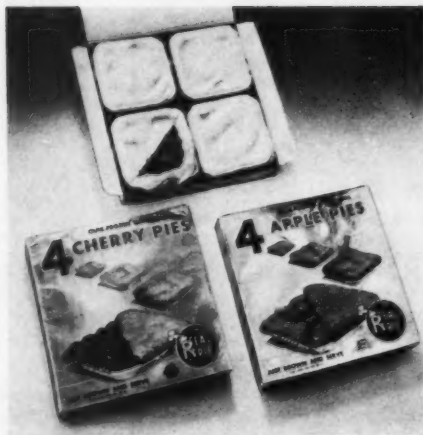
- 10** New black lithographed can with white lettering for Du Pont's Tire Black (right) is redesigned in keeping with the product's purpose. The "7," designating the automotive chemical specialties line, is in red. Cans, American Can Co., New York.

- 11** Self-dispensing carton for wall hanging holds five individually wrapped blocks of Frank J. Curran

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15



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Co.'s Didee Scent, diaper-pail deodorant. Moisture-proof cellophane prevents evaporation. CMS cellophane, American Viscose Corp., Philadelphia. Carton, National Paper Box Mfg. Co., Chicago. Packaging machine, Wrap-King Corp., Holyoke, Mass.

- 12** Four individual frozen cherry or apple pies are multi-unit packed in flat square cartons by Real Pie Bakers. Aluminum foil wrap is rotogravure printed with full-color vignettes and blue-tinted background. Wraps, Milprint, Inc., Milwaukee, Wis.

- 13** Procter & Gamble is putting 3 lbs. of Crisco in a decorative lithographed can re-usable as a kitchen canister. A polyethylene top is fitted over the regular can top. A wrap-around label calls attention to the special package. Cans, American Can Co., New York. Polyethylene tops, Artag Plastics Corp., Chi-

cago, Ill., and Brittain Products Co., Cuyahoga Falls, Ohio. Paper labels, McDonald Printing Co., Cincinnati, Ohio.

- 14** Clear polyethylene bags for Charles Konan's Capezio ballet costumes are identified by white dancing figures and a harlequin motif of either pink or blue diamonds, alternating with unprinted areas through which portion of black leotards may be seen. Bags, Lassiter Corp., New York.

- 15** New polyethylene bags for the Dixie Bean & Pea Co.'s products are color-keyed to the type of product. California Blackeyes are in a black on white bag; Pinto beans in blue and white; baby limas in black on yellow. Bags, Roto-Lith, Ltd., New York, using polyethylene film supplied by The Visking Corp., Chicago, Ill.



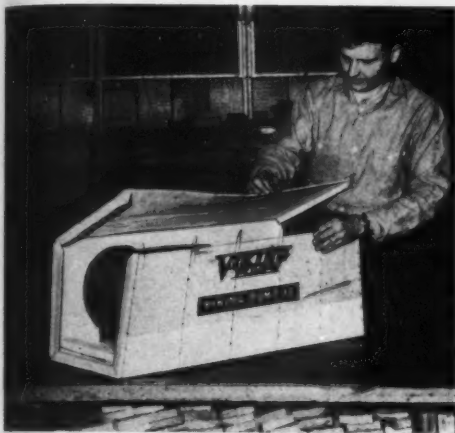
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Modern Packaging Pageant

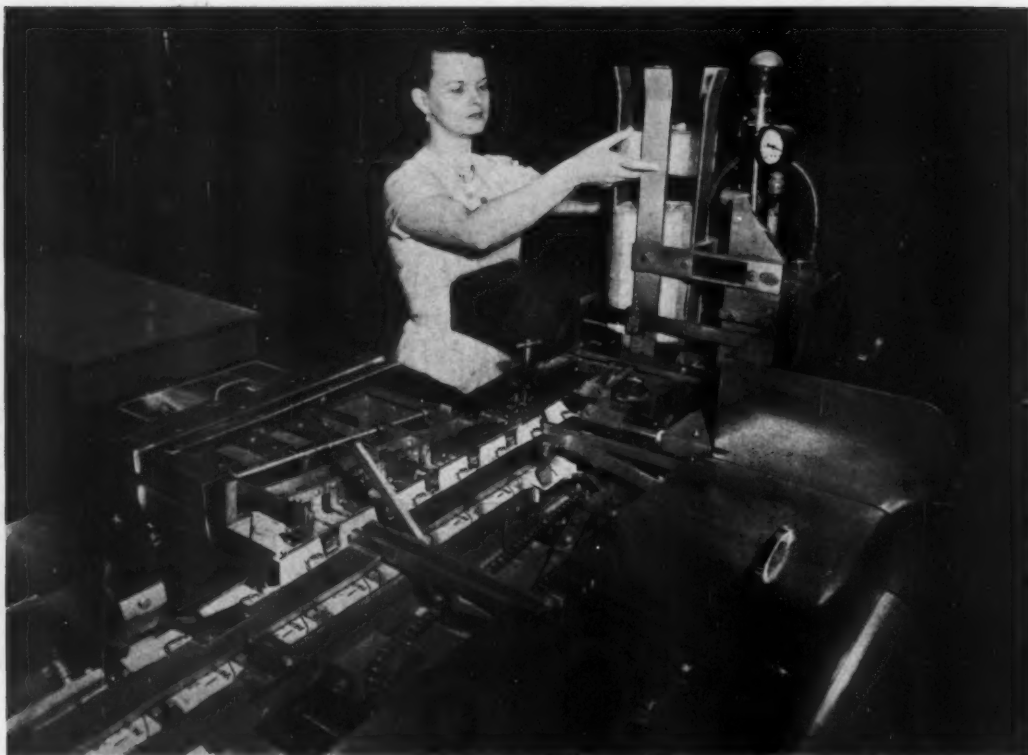
- 16** Convenient way to display products in tubes is suggested by die-cut carton for new squeeze-to-use copper and brass cleaner by Ekco Products Co. White polyethylene tubes, printed in orange and black, come in 4-oz. size and smaller one-shot size for free trial. Polyethylene tubes, Bradley Container Corp., Maynard, Mass.
- 17** Latest cigarette to appear in non-crush, flip-top folding carton is mentholated, filter-tipped Spud, recently re-introduced by Philip Morris, Inc. Horizontal panels are turquoise, bright red and white. Carton blanks (Molins machine style), Downingtown Paper Box Co., Downingtown, Pa. Design, Frank Gianninoto & Associates, New York.
- 18** "Remarkable" sales increases are credited to new printed polyethylene packages for Glendale Knit-

ting Corp.'s Nitey-Nite children's sleeping garments. Printed polyethylene, Shellmar-Betner Div., Continental Can Co., New York.

- 19** Essential of strong brand identity on industrial products is indicated by this printed wooden wire-bound box for Viking Pump Co.'s motor-vehicle gas-fuel pumps. Boxes, made from one-piece blanks, are folded to form four sides. Boxes, Flour City Box Mfg. Co., Waterloo, Iowa.
- 20** Instant brand recognition in store or warehouse is the aim behind these redesigned corrugated shipping containers (right) for Carolina Long Grain Rice. Printing is red and white on all four panels. Containers, available in five sizes, can be used to build displays. Corrugated containers, Container Corp. of America, Chicago.

Coordinated cartoning

Whitehall Pharmacal caps a model line for tins of Anacin with a cartoning machine specially designed to handle a novel, spot-sealed, side-filling display box



Side-loading cartoner handles top-opening display carton by means of carton design which is tailored to the requirements of the machine. Carton manufacturer supplies cartons to plant with the front seam only temporarily spot glued, making side loading possible on the machine. After cartons have been loaded, the two spot seals are broken on machine so that dealer has an easy-to-open package without damaging riser.

A striking example of the benefits of coordinated package planning to fit carton design and new automatic cartoning equipment, one to the other, may be found in the new dozen carton which acts as both shipper and display for tins of the Whitehall Pharmacal Co.'s Anacin tablets.

Set up, filled and closed automatically on high-speed equipment, the folding carton is loaded from the side for faster operation, yet constructed so that its top flap may be opened conventionally to con-

vert the package into an attractive counter display unit with die-cut riser.

The carton comes with a temporary spot seal of the front flaps to facilitate the sidewise cartoning operation; this seal is automatically broken on the cartoning machine, after the cartoning operation is completed, to make it easy for the dealer to set up the lid as a display header.

Printed in bright yellow, black and red, the new Anacin display carton replaces a conventional fold-

ing carton which was set up, filled and closed manually. Under the old system, a team of eight operators was required to keep pace with the four automatic machines which fill the tablets into the one-dozen-count, snap-open-style, hinged metal containers.

Installation of the automatic cartoning unit at the Whitehall plant in Elkhart, Ind., released these workers for other duties and netted a considerable saving of valuable floor space by eliminating the need for the table formerly used with the manual packing operation.

To make its double function possible, the carton blank is supplied to Whitehall with the front-panel seam spot sealed at only two points, so that it can be unsealed automatically *after* the carton has been filled and closed and before the cartons are assembled in corrugated shipping containers at the end of the packing line.

The particular cartoning machine involved in this installation is used only in conjunction with the 12-tablet tins of Anacin. The larger 30-tablet tins, as well as the 50- and 100-tablet bottles of Anacin, are also handled in the same plant, but on separate packaging lines incorporating other equipment.

The high efficiency of the 12-tablet line is made possible through close coordination of equipment and attention to construction details of the two types of packages used—the hinged, lithographed tins, which open conveniently on application of finger pressure at the right front corner, and the folding-style counter display cartons. The entire line is set up to minimize lost motion at all points and to keep production flowing smoothly despite occasional “jam-ups,” almost inevitable on high-speed packaging installations.

Filling of tins

Efficiency on this Anacin tablet line is achieved by the manner in which the metal containers, which are lithographed in red and dark green against a yellow background, are delivered to the Whitehall plant.

The corrugated shipping containers used for the empty Anacin tins hold 2,550 of the 12-tablet packages, arranged in uniform layers of 50 tins each. Tins are shipped to the company with the hinged top folded back, eliminating opening prior to filling. Before the metal boxes are brought to the four-tablet filling lines, the top and one side of the shipping container are cut away to facilitate orderly removal from the box. Thin chipboard separators keep each layer of tins individually accessible.

Operators at the head of each packing line lift the tins from the supply containers, three or four

at a time with each hand, placing them in the spaced “buckets” of the conveyor line which carries the packages through the sequence of automatic filling and closing operations. When the operator exhausts each layer of metal boxes, she removes and discards the chipboard separator, uncovering the next layer of tins.

As the hinged containers, with lids folded back almost horizontally, move rapidly toward the tablet filling mechanism, a small slip of white tissue paper, perforated with a date code, is cut automatically from a supply roll and deposited in the bottom of each tin. The round Anacin tablets, released from a supply hopper and rolling continuously down a



Temporary glue spots to facilitate machine handling are shown on opened carton blank in foreground. Display cartons hold a dozen 12-tablet tins of Anacin. Dealer opens them in conventional manner for counter set-up as shown at the right. Tins of 12 tablets with flip-open hinge and quadruple-fold insert are also mechanically packaged.

series of 12 inclined grooves, are directed into each container.

The loading of the packages is accomplished in a series of three integrated operations. Each row of four tablets feeds sequentially into the tin and the first two groups are pushed back by mechanical fingers to make room for the next row. After completion of the filling operation, another strip of tissue is cut from a second supply roll and deposited on top of the 12 tablets.

At the completion of the tablet loading operation, the hinged lids contact a tapered plow and begin to lift up, preparatory to closing. Before the box closes, however, a printed circular, measuring



Opened metal tins are placed in "buckets" of infed conveyor. Tins are packed in layers of 50 units each, separated by chipboard sheets. Top and side of the shipping container are removed to provide easy access to the 12-tablet Anacin tins.

slightly more than 3 by 6 in. when opened, is fed from a supply magazine by another machine, given a quadruple fold and slid into the partially closed tin. This folder, which provides full information on the product and its use, also cushions the tablets against rattling. Following insertion of the folded circular, the container lid with its friction catch is snapped firmly shut by the pressure of a rubber roller.

The filling and closing operation on the 12-tablet line is at a rate of 120 packages per minute on four similarly equipped lines. Each line has two operators—one to feed the empty tins into the packaging machine, the other stationed at the machine to supervise the flow of operations and stop and start the line as required.

Filled packages transfer to a conveyor belt with separating rails, which carry them toward the cartoning unit. Before switching over to this line, each column of packages passes through a height-checking fixture connected to a microswitch and solenoid unit.

Any tin not fully closed or having part of the folded circular exposed is automatically ejected from the line, dropping through a chute into a salvage container. Elimination of faulty packages on all four filling lines prevents jam-ups during the automatic cartoning operation.

Before being fed single-file to the automatic cartoning machine, the metal containers make another 90-deg. change in direction at the converger unit, which assembles and spaces the containers on the infed belt.

At this point a "trap door" automatically opens whenever the cartoning unit is jammed and the

Entire packaging production line



Code-dated strip of tissue (left) is placed in each tin before tablets are filled by machine at center. Tablets, fed from hopper, move down inclined grooves into container in three rows of four tablets each. Tins are filled at rate of 120 per minute. Bulb (foreground) forewarns of jam-ups at cartoning machine some distance away.

filled tins are accumulated in pails, to be fed back into the cartoner later. This provides a steady flow of tins into the cartoner whenever the operation of the filling machines is interrupted. A toggle switch at this point enables the cartoning-machine attendant to turn on a warning light on all four tablet-packing lines simultaneously to halt the flow in the event of trouble.

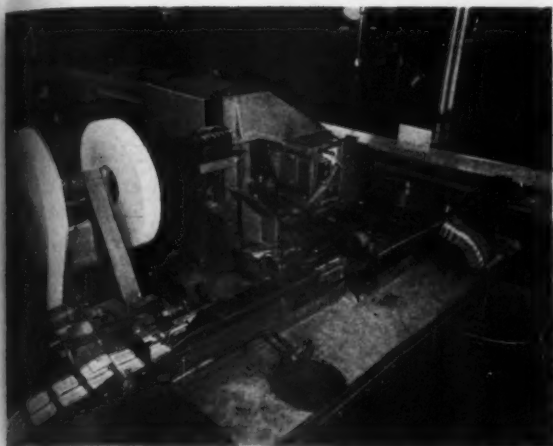
Cartoning

The automatic cartoning machine sets up the pre-glued blanks of the counter display packages, inserts a dozen tins in each carton and glue seals the end flaps. The top flap should not be glued when it reaches the retailer. This is necessary to provide easy opening and to assure that the display will be set up properly.

However, this flap *must* be sealed at the time the carton is set up by the machine. To solve this problem, the flaps are received from the manufacturer spot glued only, so the seal can be broken easily after the carton is set up, but before packing in the case for shipment to the retailer.

The closed tins are inserted into the open end of the cartons in three layers of four units each. The tins are conveyed on an upward incline so that push bars can intermittently slide them into the

is set up to minimize lost motion



Top tissue is placed over tablets before machine at center quadruple folds and inserts circular in each tin, which is snapped shut by rubber roller. Chute (right) is opposite solenoid-operated knock-out which ejects from the line packages improperly closed or having part of the folded circular exposed before transfer to outer conveyor.

opened cartons indexed behind them. For each layer of tins, this operation is accomplished in one "push" of four packages each, until all three levels have been filled.

The cartons always remain on the same level during the complete filling operation, moving to each loading station in sequence. As soon as the top layer of tins has been slid into the package, the remaining end flaps are glued and closed and the carton, standing on edge, moves between vertical compression belts which secure the end seals.

At the compression section, the packages shift to a horizontal position and transfer to another conveyor moving at right angles to the belt. A weighted lever arm presses down momentarily on the top front edge of each carton, snapping the two spot seals made by the carton manufacturer. This shearing is accomplished because the tucked-in front flap is slightly shallower than the full depth of the carton, permitting it to be pushed down slightly to break the temporary glue seals.

The completed counter display packages move by conveyor to an adjacent packing table, where they are placed manually in corrugated shipping containers holding 24, 36 and 60 of the cartons. After emerging from the case-sealing machine, which is fitted with an attachment for date coding the pack-

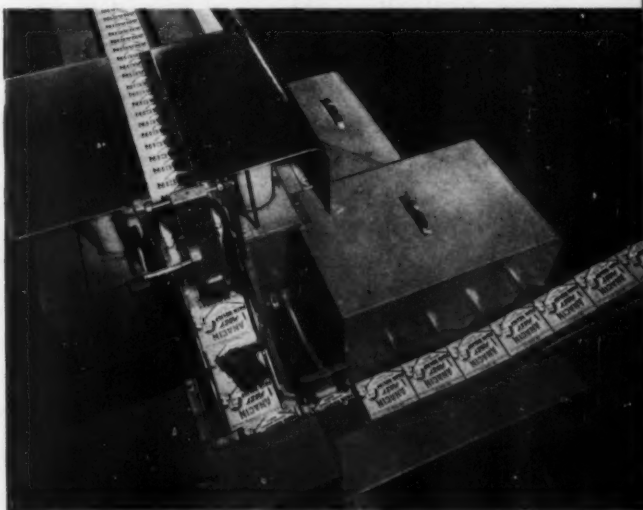


Traffic center for all four lines in this converging unit where tins are automatically assembled single file before feeding into cartoning machine (right). Beneath notched hand wheel is a kick-out chute through which packages may be temporarily diverted in the event of jam-ups.

ages to facilitate stock rotation, the shippers are placed on pallets. Fork lift trucks remove the pallets to the warehouse area, ready for shipment.

Credits: Automatic filling machines for 12-tablet tins, equipment for inserting circulars and closing tins and automatic cartoning machine for packing dozen tins in folding display carton by F. B. Redington Co., 3010 St. Charles Rd., Bellwood, Ill. Case-sealing unit by Standard-Knapp Div., Emhart Mfg. Co., Main St., Portland, Conn. Coding attachment for case sealer by Kiwi Coders Corp., 3804 N. Clark St., Chicago, Ill.

Breaking temporary seal is accomplished by weighted lever arm (center) which exerts momentary pressure on carton. Conveyor carries cartons to table, for packing in shipping cartons.



1st

Packaging Machinery and Materials Show

129 exhibitors will demonstrate latest equipment and techniques at new venture in Cleveland Auditorium, Sept. 11-14;

Packaging Institute Forum meets simultaneously at Hotel Statler

Attention of the entire packaging field will be directed to Cleveland, Ohio, this September where interest will center on two events scheduled to take place simultaneously, thereby making attendance at both realistically practical.

The Packaging Machinery Mfrs. Institute sponsors its first Packaging Machinery and Materials Exposition in the Cleveland Auditorium, Sept. 11-14.

At the same time, in Cleveland's Hotel Statler, the Packaging Institute will hold its 18th Annual Packaging Institute Forum, Sept. 10-12.

PMMI Exposition

The Packaging Machinery and Materials Exposition represents the first venture to concentrate on the purely mechanical and technical aspects of packaging in one special, separate packaging trade show. Here, for the first time, according to the announced purpose, packagers will be able to view complete packaging operations in action with machine functions integrated to packaging-line production and in correlation to the packaging materials which they handle. Between 10,000 and 15,000 visitors are expected to attend the exhibition.

It will be a "how-to-do-it" show, according to Tom Miller, president of The Packaging Machinery Mfrs. Institute, with somewhere in the neighborhood of 250 pieces of equipment in actual operation in booths manned by more than 350 technicians. Reportedly more than 126 pieces of new equipment, never before exhibited, will be unveiled for the first time at the Exhibition, which is under the chairmanship of W. B. Bronander, Jr., Scandia Mfg. Co.

Some 50,000 sq. ft. of exhibit space will be occupied by exhibitors whose booths will be staffed by engineers and technical personnel to give on-the-spot answers to visitors on their individual problems. Special Government packaging exhibits will also be features of this new kind of packaging show.

"The objective of the show," says Mr. Miller, "is in keeping with the desire of the packaging industry

to have this Exposition a technical show where customers can get the information they need to make more effective use of packaging machinery and materials in the highly competitive field of consumer packaging."

A survey of the exhibiting companies indicated that higher speed, versatility and more automatic operation are the three key developments in the packaging machinery and materials field which will be emphasized at the Exposition.

Equipment, materials and packaging techniques will be correlated at the Exposition to cover all phases of packaging—correct design, controlled filling, labeling, adhesives, inks, marking and the selection of packaging materials.

The Exposition will be open in the Cleveland Auditorium as follows: Tuesday, Sept. 11, from 12 noon to 6 p.m.; Wednesday and Thursday, Sept. 12 and 13, from 10 a.m. to 6 p.m.; Friday, Sept. 14, from 9 a.m. to 12 noon. There will be no charge for admission. Visitors will merely be asked for company affiliations.

Hotel reservations can be made through the Cleveland Housing Bureau, 511 Terminal Tower, Cleveland 13, Ohio. Requests for reservations should include first, second and third choices of hotels, type of room desired and arrival time.

The P.I. Forum

The Packaging Institute announces as its keynote speaker Cola G. Parker, president of the National Assn. of Manufacturers. Mr. Parker will set the theme of the 18th Annual P. I. Forum, "Dollars and Sense of Protective Packaging," at the opening luncheon of the three-day meeting, Monday, Sept. 10.

As former chairman of the board of Kimberly-Clark Corp. and a past president of the American Paper and Pulp Assn., Mr. Parker brings to the forum a rich background of packaging experience.

Guest speaker at the opening Monday morning



Alphabetical guide to exhibitors with floor plan

The Packaging Machinery & Materials Exposition of 1956, Cleveland Auditorium, Ohio

Exhibitor	Booth No.	Exhibitor	Booth No.
A-B-C Packaging Machine Corp.	759	Great Lakes Box Co.	514
A & M Tool & Die Co.	654	Griffin-Rutgers, Inc.	502
Abbott Plastic Machine Corp.	515		
Algene Marking Equipment Co.	319		
Alpha Engineering & Machine Works, Inc.	622	Hansella Mfg. Corp.	415
Aluminum Co. of America	612	Hayssen Mfg. Co.	215
Amsco Packaging Machinery, Inc.	201, 202	Heinrich, H. H., Co.	525
Arabol Mfg. Co.	554	Hobbs Mfg. Co.	308
Arenco Machine Co., Inc.	114	Hope Machine Co.	313
Atlantic Supply Co.	561	Horix Mfg. Co.	316
		Howard Publishing Co.	754
		Hudson Sharp Machine Co.	109

Barber Colman Co., Wheelco Industries Div.	428	Ideal Stencil Machine Co.	620
Bartelt Engineering Co.	103	International Filling Machine Corp.	556
Battle Creek Packaging Machines, Inc.	116	International Staple & Machine Co.	610
Better Packages, Inc.	527	Island Equipment Corp.	512
Bivans, E. L., Inc.	406	Ivers Lee Co.	305
Brown Bag Filling Machine Co., Inc.	413		
Burt Machine Co.	122	Jones, R. A., Co.	425

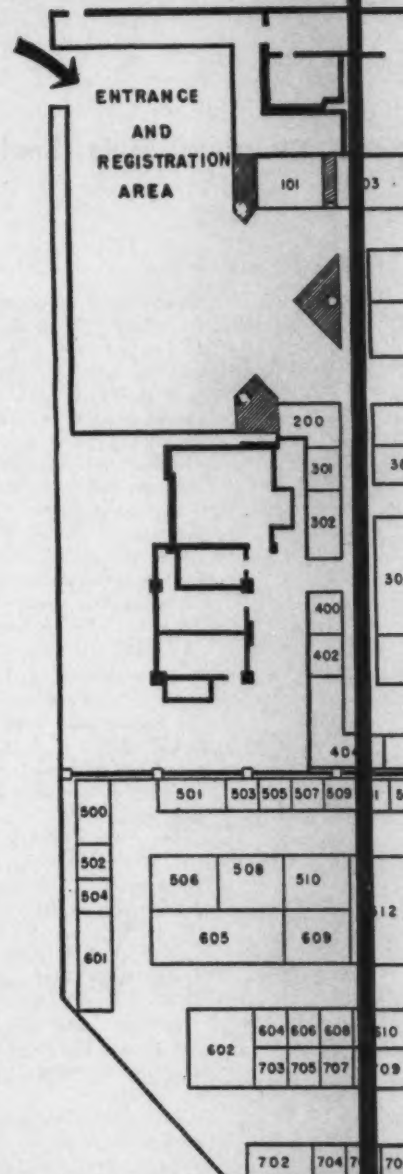
Cameron Machine Co.	112	Kalamazoo Vegetable Parchment Co.	651
Chaffee, Ralph, & Co.	400	Kartridg Pak Machine Co.	553
Chain Belt Co.	653	Kidder Press Co., Inc.	551
Chisholm Ryder Co. of Pa.	565	Kingsbury & Davis Div., Food Machinery & Chemical Corp.	201, 202
Clark-Aiken Co.	315	Knowlton, M. D., Co.	107
Clybourn Machine Corp.	216		
Colton, Arthur, Co.	426	Labelette Co.	719
Comet Industries	501	Lakso Co., Inc.	411
Conapac Corp., Holweg Div.	602	Lynch Corp.	314
Consolidated Packaging Machinery Corp.	417		
Container Equipment Corp.	302	MRM Co., Inc.	306
Continental Can Co.	656	Manhattan Paste & Glue Co., Inc.	214
Currie Packaging Co.	605	Markem Machine Co.	307

Dennison Mfg. Co.	563	Machinery Service Co., Inc.	662
Derby Sealers, Inc.	303	Manton Bros., Ltd.	509
Dixie Wax Paper Co.	751	Mark Specialty Co.	618
Dobeckmun Co.	115	Marsh Stencil Machine Co.	513
Doughboy Industries, Inc.	810	Mercury Heat Sealing Equipment Co.	500
Dudley Machinery Corp.	430	Miller Wrapping & Sealing Machine Co.	201, 202
Du Pont, E. I., De Nemours & Co., Inc.	409	Milprint, Inc.	550
		MODERN PACKAGING	655
		Monarch Marking System Co.	504
		Moore, Kenneth J., & Co.	519

Economic Machinery Co. Div., Geo. J. Meyer Mfg. Co.	421	National Adhesives Div., National Starch Products, Inc.	200
Electronic Machine Parts, Inc.	420	National Equipment Corp.	661
Elgin Mfg. Co.	558	National Flexible Packaging Assn.	750
Elliott Mfg. Co.	210	New Jersey Electronic Co.	523
Eriez Mfg. Co.	321	New Jersey Machine Corp.	406
Exact Weight Scale Co.	650		

Ferguson, J. L., Co.	110	Olin Film Div., Olin Mathieson Chemical Co.	Registration area
Fischbein, Dave, Co.	402		
Flow Magazine	768		

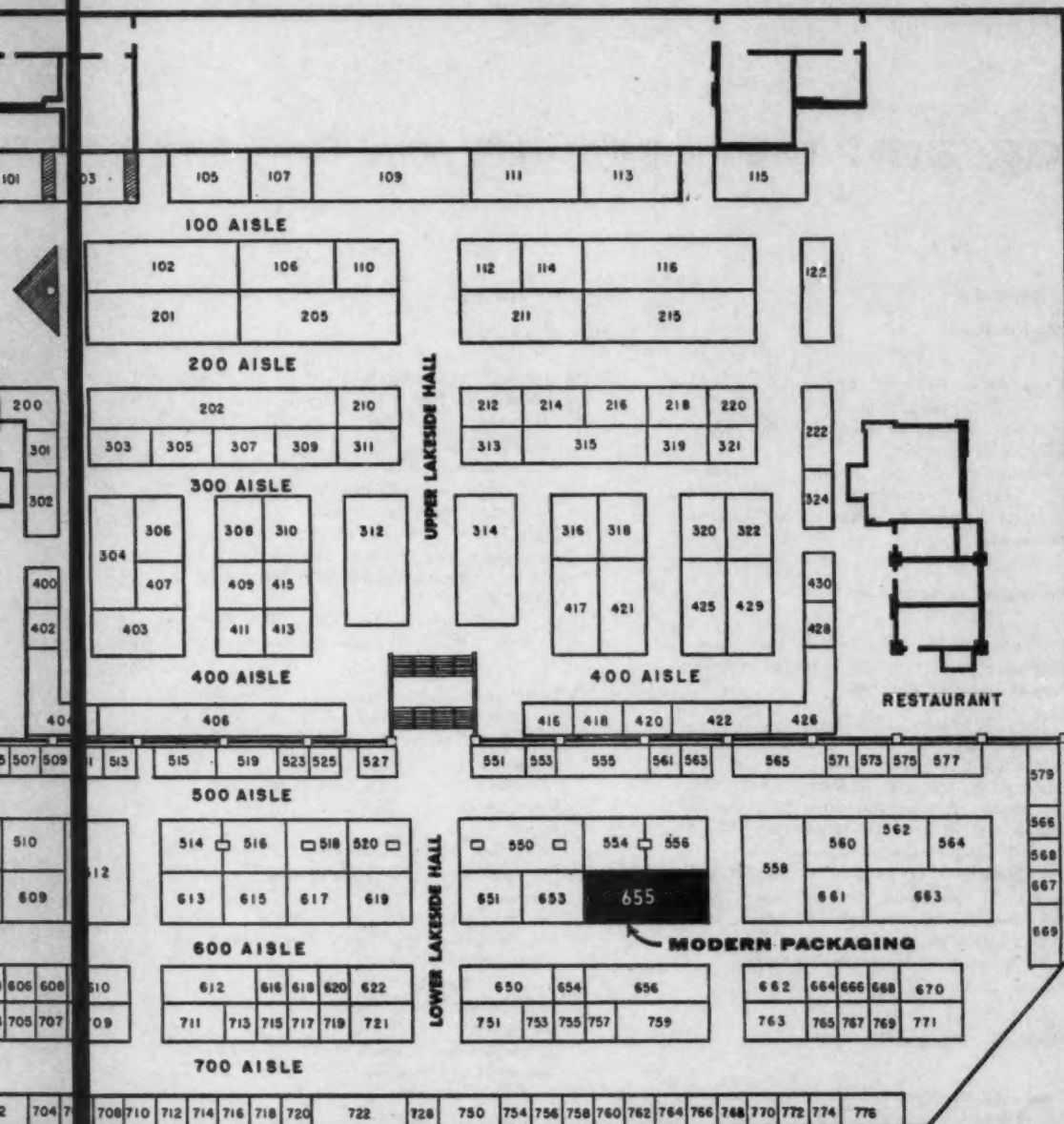
General Electric Co.	571	Package Engineering	220
Gottsoch, Adolph, Inc.	318	Package Machinery Co.	102
		Packaging Parade	101
		Packmasters	616
		Paisley Products, Inc., Div. of Morningstar, Nicol, Inc.	617



Exhibitor	Booth No.
Pak Rapid, Inc.	416
Palmer Supplies Co.	301
Paper Converting Machine Co.	407
Peters Machinery Co.	211, 218
Pneumatic Scale Corp., Ltd.	304
Post Machinery Co.	113
Potdevin Machine Co.	663
Redington, F. B., Co.	106
Resina Automatic Machinery Co., Inc.	721
Reynolds Metals Co.	306
Riegel Paper Corp.	522

plan of booth numbers

um, Ohio, Sept. 11-14



Booth No.	Exhibitor	Booth No.	Exhibitor	Booth No.	Exhibitor	Booth No.	Exhibitor
416	Auto Wrap Machine Corp., Div.	212	Stein, Hall & Co., Inc.	601	U. S. Automatic Box Machinery Co.,	105	
301	Conapac Corp.		Stokes & Smith Co., Sub. of FMC	201, 202	Inc.	520	
407			Swift & Co., Adhesive Products	516	U. S. Bottlers Machinery Co.	418	
1, 218			Dept.		Vertrod Corp.		
304	Auto Specialties & Systems, Inc.	511	Tennant, C., Sons & Co. of New York	615			
113	Landia Mfg. Co.	312	Toledo Scale Co.	613	Waxed Paper Merchandising	722	
663	Shooler Mfg. Co.	222	Trescott Co., Inc.	311	Council, Inc.	404	
	Complex Packaging Machinery Div.,		Triangle Package Machinery Co.	429	Weber, H. G., & Co., Inc.	403	
	Food Machinery & Chemical Corp.				Woodman Co., Inc.	324	
106	Southern Adhesives Corp.	201, 202			Wrap Ade Machine Co., Inc.	320	
721	Standard Knapp Div., Emhart Mfg.	518	Union Paste Co.	518	Wrap-King Corp.	205	
309	Co.	422	United Shoe Machinery Corp.	555	Wright Machinery Co.		
322	Standard Packaging Corp.	111					

Program: Packaging Institute—18th Annual Forum, Hotel Statler, Chicago

Monday, Sept. 10

9:00 Registration

10:00 President's Address, Herbert T. Holbrook, Standard Packaging Corp.
Business Meeting of Packaging Institute and Election of Directors
Introductory Address, Charles F. Honeywell, U. S. Dept. of Commerce
Assn. of National Advertisers Film, "Challenge to America"

12:15 Packaging Institute Luncheon

1:00 Keynote Address, The Dollars and Sense of Protective Packaging, Cola G. Parker, president, National Assn. of Manufacturers

2:00 Dynamics of Protective Packaging, theme to be developed by four speakers:
Basics of the Dynamics of Packaging, Dr. Frank C. Campins, Polymer Industries, Inc., chairman.
The Biotics of Protective Packaging, Dr. John C. Bird, Lederle Laboratories Div.
The Climatics of Protective Packaging, Dr. L. C. Simerl, Olin Mathieson Chemical Corp.
The Mechanics of Protective Packaging, Allyn C. Beardsell, Container Laboratories, Inc.
The Chemicals of Protective Packaging, W. E. Brown, The Dow Chemical Co.

6:00 President's Reception

6:30 Packaging Institute Awards Dinner, featuring the presentation of the Technical Operations Committee Award of Merit, several Packaging Institute Special Recognition Awards and announcement of details of the Packaging Institute Corporate and Professional Awards for Outstanding Contribution to Packaging

Tuesday, Sept. 11

9:00 Registration

9:30 Printed Packaging Seminar, E. J. Monahan, The National Biscuit Co., chairman
Protecting the Uniformity and Sales Appeal of Your Package:
The Advertising Value of Your Package, Frank Gianninoto, industrial designer and president of the Package Designers Council
This Is Color, Frank W. Cray, Interchemical Corp., presenting technical color film re color in industrial enamels, textiles, four-color process and color TV
A Contribution to the Folding Box Industry, William B. Banks, The Lord Baltimore Press

9:30 Drug and Pharmaceutical Seminar, Carl B. Burnside, Eli Lilly & Co., chairman
(Full day)
Dollars and Sense Developments in Drug and Pharmaceutical Packaging:
Flexible Films and Packaging Materials, Paul Geary, Smith, Kline & French Laboratories, moderator
The Place of Foil and Film Laminations in Protective Packaging, George Lacy, The Dobeckmun Co.
Discussion of the Mechanical Aspects of Overwraps and Bundling, Harold Mosedale, Jr., Package Machinery Co.
Glass . . . New Uses, New Manufacturing Techniques, Oscar Norris, Winthrop Laboratories, Inc., moderator
Techniques and Methods for the Use of Plastic-Coated Glass Containers, A. R. Marks and Edmund Budzilek, Wheaton Glass Co.
Protective Uses of Ceramic Coatings on Glassware, E. C. Emanuel, Armstrong Cork Co.
Research and the Glass Container of Tomorrow, J. W. Hackett, Owens-Illinois Glass Co.
Present Status of Irradiation Sterilization, George Schleck, Merck & Co., Inc., moderator

at r, Cleveland, Ohio, Sept. 10-12, 1956

Theory and Instrumentation of Irradiation, Dr. E. J. Henley, Columbia University
The Aspects and Use of Irradiation Sterilization, Dr. Velma L. Chandler, Ethicon, Inc.
Package Design as Affected by Electron Beam Sterilization, F. L. Foster, Jr., High Voltage Engineering Co.
Aerosols . . . Next Stop, The Pharmaceutical Industry, Richard J. Hennessey, Lederle Laboratories Div., moderator
Aerosols . . . Principles and Scope of Operation, T. D. Johnson, Kinetic Chemical Div., E. I. du Pont de Nemours & Co., Inc.
Pharmaceutical Aerosols From Idea to Product, Morris Root, George Barr & Co.

9:30 Flexible Packaging Seminar, W. B. Tibbets,
(Full day) Bakelite Co., chairman
The Dollars and Sense of Protective Flexible Packaging:
Functional Properties of Packaging Structures, John M. Cowan, National Flexible Packaging Assn., moderator
Cellulose Acetate Story, D. S. Hopping, Celanese Corp. of America
Foil Story, A. I. Totten, Reynolds Metals Co.
Mylar Story, W. H. Wood, E. I. du Pont de Nemours & Co., Inc.
Paper Story, E. G. Penn, Riegel Paper Corp.
Pliofilm Story, Paul Beebe, The Goodyear Tire & Rubber Co., Inc.
Polyethylene and its Functional Properties: Basic History and Properties, Mr. Tibbets
Functional Coatings, F. T. Winalow, Continental Can Co., Inc.
Machine Handling, representative of Eastman Kodak Co.
Multiwall Bag Performance, representative of St. Regis Paper Co.
Protection Through Lamination, representative of The Borden Co.
Vacuum and Gas Flexible Packaging, John Rote, Standard Packaging Corp.

12:30 Packaging Institute Luncheon
Protection From Overtime Parking, Rex Paxton, Sutherland Paper Co.

2:00 Food Packaging Seminar, Dr. L. J. Hayhurst,
Kraft Foods Co., chairman
Protective Packaging for the Armed Forces:
The Quartermaster Food and Container Institute Story, Col. John D. Peterman, Commandant
New Horizons for Simplified Food Logistics, Dr. Virgil O. Wodicka, Engineering Food Laboratory
Food Laboratories and Radiation Preservation, Capt. Reuben Pomerantz, Radiation Preservation Officer
Packaging for Irradiated Foods, George Tripp, Radiation Preservation Project
Food Packaging for Aerial Delivery, Barton Rossee, Container Laboratories, Inc.

Wednesday, Sept. 12

9:00 Registration

9:30 Production Line Seminar, Carr H. Parsons,
Lederle Laboratories Div., chairman
Production Line Problems From the Dollars and Sense Approach, Mr. Parsons
Layout of New Production Lines, Edward Wixted, Schering Corp.
Protective Packaging on the Production Line, Frank Senger, Ortho Pharmaceutical Corp.
Protection for Buyer and Seller in Packaging Machinery Purchase Specifications, William B. Bronander, Jr., Scandia Mfg. Co.

12:30 Packaging Institute Luncheon
Dollars and Sense of Protective Packaging at Retail, Charles W. Harper, Sears, Roebuck & Co.

2:00 Packaging Research and Development Seminar, Charles A. Southwick, Jr.,
technical editor, MODERN PACKAGING, chairman

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session will be Charles F. Honeywell of the U. S. Dept. of Commerce. His speech follows the President's Address by Herbert T. Holbrook, Standard Packaging Corp. and president of the Packaging Institute. The business meeting of the Packaging Institute and election of directors will also be held at the opening session.

Tuesday luncheon speaker will be Rex Paxton, Sutherland Paper Co., Kalamazoo, Mich., whose subject will be "Protection from Overtime Parking." Charles W. Harper, Sears, Roebuck & Co., will further the theme of the Forum at the Wednesday luncheon in his address, "Dollars and Sense of Protective Packaging at Retail."

A new event this year will be the Packaging Institute Awards Dinner on Monday evening, featuring the presentation of "The Technical Operations Committee Award of Merit," several "Packaging Institute Special Recognition Awards" and announcement of the details of the "Packaging Institute Corporate and Professional Awards for Outstanding Contribution to Packaging."

Speakers at the Monday afternoon general session will offer practical approaches to the protection of packaged products against wasted dollars due to failures caused by mechanical, biotic, chemical and climatic problems, to be discussed by four outstanding technical authorities in their respective fields.

Intensive specialized sessions on the second day will include a full-day Drug and Pharmaceutical Seminar, a full-day Flexible Packaging Seminar and half-day seminars each on Printed Packaging and on Food Packaging.

The Wednesday morning program is reserved exclusively for a Production Line Seminar devoted to "Layout of New Production Lines," "Protective Packaging on the Production Line," "Protection for Buyer and Seller in Packaging Machinery Purchase Specifications." A rapid review and preview of the very latest packaging ideas will be presented at the final Wednesday afternoon "Packaging Research and Development Seminar."

Those planning to attend all or any of the P.I. Forum sessions are urged to send in advance registration to save time at the opening of the meetings. Tickets and badges will be prepared in advance as specified, ready for pick-up at the Forum's Advance Registration Desk. Registration is \$10 for each day. The Monday evening Reception and Awards Dinner tickets will be \$10 per person. Luncheon tickets are \$6 each for each of the three days. Advance registration blanks may be obtained by writing Packaging Institute, Inc., 342 Madison Ave., New York 17.

For the convenience of readers, a complete guide to the PMMI Exposition and the P.I. Forum program is attached.

The following alphabetical list—including all exhibitors who answered MODERN PACKAGING's questionnaire before the deadline date—gives details of most exhibits, personnel and hotel headquarters:

A-B-C PACKAGING MACHINE CORP. *Booth 759.* Exhibit of an automatic case opener and positioner; also short automatic case sealer. *Personnel:* O. A. Rupp, R. Weatherford, R. W. Stevens, W. M. Haynes. *Hotel:* Cleveland.

A & M TOOL & DIE CO., INC. *Booth 654.* Operation of latest model 22-station Saga tube filling and sealing unit, filling and sealing Bracon polyethylene collapsible tubes, manufactured by Bradley Container Corp.; also selection of Bracon tubes in various sizes for various applications and some of newest accessories for Saga machine line. *Personnel:* S. Simonelli, A. Loconto, G. Simonelli, A. Aliberti, P. A. Porter, E. Simonelli. *Hotel:* Cleveland.

ABBOTT PLASTIC MACHINE CORP. *Booth 515.* Display of skin-pack process for packaging. *Personnel:* C. Murano, B. Franklin, J. Margo. *Hotel:* Jefferson.

ALGENE MARKING EQUIPMENT CO. *Booth 319.* Exhibit of hand-operated roller printers for interchangeable texts for imprinting glass, wood, plastics, metal, cartons, etc.; continuous coders, one-line copy automatic marking unit for code dating or continuous marking of fabrics, boxes, cartons, glass, metal, rubber, plastics, waxed surfaces, etc.; conveyor marker, automatic marking device for multiple lines of copy which are interchangeable for use on cartons, wood, boxes, etc.; also multiple printers, power conveyor with marking head for imprinting multiple lines of copy on one, two, three and four sides of cartons with product names, addresses, etc.

ALPHA ENGINEERING & MACHINE WORKS, INC. *Booth 622.* Exhibit of automatic processing machine for the shaking and gassing of pressurized whipped-cream or concentrated soft-drink containers; also aerosol-type can valve closing apparatus. *Personnel:* O. A. Orwoll, J. Hancock. *Hotel:* Hollenden.

AMSCO PACKAGING MACHINERY, INC. *Booths 201, 202.* Exhibit of the Model S, Hi-Speed automatic rotary sealer for cellophane and other types of bags; Model S poly rotary sealer for polyethylene and Pliofilm bags; Hi-Speed jaw bag sealing and labeling machine, with single hand-screw adjustment for instantaneous change-over from one label size to another, for all heat-sealable bag materials, including cellophane, polyethylene, Pliofilm, saran, etc.; also equipment utilized in Twistite/Shrinkwrap packaging method for packaging processed meats, cheese, etc. *Personnel:* E. E. Messmer, J. D. Sylvester, J. D. Keenan, G. G. Cignoli, [Continued on page 272]

Temperature-sensitive

A new temperature-sensitive fill-control device, which adjusts the net volume of fill according to the temperature of the product, reportedly can save nearly \$50,000 a year per filling line in quart-can, oil-filling operations.

The device, pioneered in use by The Atlantic Refining Co., Philadelphia, in cooperation with the can company which engineered the method and manufactures the device, is now installed on filling lines of several large petroleum-refining companies.

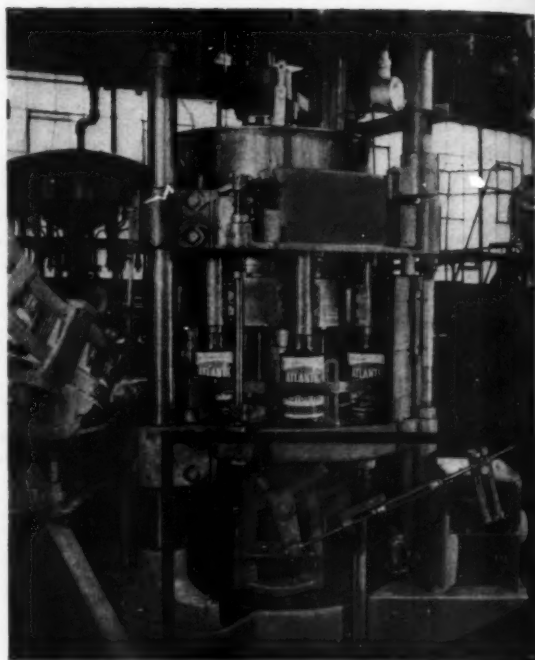
The method, apparently, could mean large financial savings in packaging many items other than motor oils, wherever temperature is a factor in expanding and contracting volume of the product. Among the suggested products are: alcohols, (including liquid detergents), glycols, paints (particularly metallic paints), solvents including cleaning fluids, aromatic hydrocarbons, liquid insecticides, vegetable oils and liquid fertilizers. It is applicable to water-base products, although the expansion and contraction of such products by temperature changes is not so great as in many other types of products.

The Atlantic Refining Co., which now has had the system in operation for nearly three years, reports that the device is responsible for reducing the rate of overfill 75% on an over-all average.

In principle, the device consists simply of a thermometer placed in the filler bowl and connected with a motor drive equipped with a filler-volume adjuster. As temperature of the oil rises or falls, the filler-volume adjuster automatically compensates for the variation in accordance with predetermined, temperature-density relationship of the product with volume of fill.

It is well known, of course, that oil expands with higher temperatures and contracts with lower temperatures. With a filler working on volume principle, a dropping temperature at the time of fill thus causes an overfill. The overfill in a manual system must be large enough to assure a full quart, generally accepted in the industry to be a quart at 60 deg. F. In fact, the capacity of a quart oil can has been established on that basis.

If a filler, without automatic temperature fill control, is set to deliver a quart of oil at 80 deg. F. and the product temperature drops to 60 deg. F., 1% of the oil will be lost in overfill—actually given away for free. The rate of change due to contraction of product can be figured generally at a 1% loss for every 20 deg. drop in temperature. Similarly if oil in a filler set for delivering at 60 deg. F. drops to



Overfill is cut 75 % in quart cans of motor oil at Atlantic Refining Co. as result of new fill control device shown in right foreground, connected with nine-head cam-action filler.

50 deg. F., the loss is about 1/2% oil in overfill.

The following table illustrates typical examples of fill loss that can be experienced, based on an arbitrary cost of 15 cents per quart at various operating speeds and temperature changes.

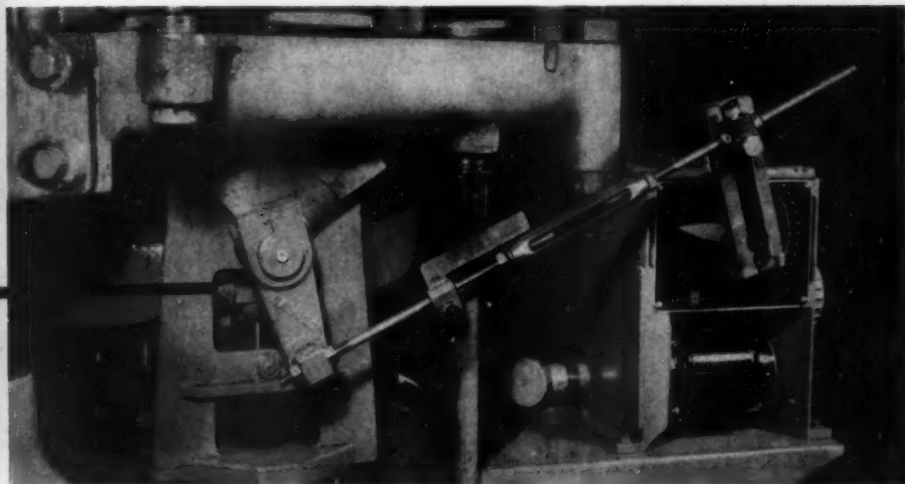
Estimated overfill loss based on oil at 15 cents per quart

Operating speed	Temperature change	Loss per minute	Loss per hour	Loss per 7-hr. day	Loss per year (250 days)
200 cans/min.	5° F.	\$0.0613	\$3.68	\$25.76	\$6,440
300 cans/min.	5° F.	0.0921	5.52	38.64	9,660
350 cans/min.	5° F.	0.1073	6.44	45.08	11,270
350 cans/min.	10° F.	0.2145	12.87	90.07	22,517

Since 1933, when the oil industry first began filling motor oils in quart cans, the loss through overfill to assure the consumer of a full quart has been a serious matter. In some instances overfills have run as high as 2 oz. The oil industry, by rule of thumb, has quite generally operated on the prin-

fill control

*New device pioneered in use at Atlantic Refining
offers economical new way
to solve the costly overfill problem for wide variety of products*



Close-up shows arm that connects the thermometer (not visible) in filler bowl with the motor drive, equipped with filler-volume adjuster (right). Further precision adjustments may be made by the gauge on the arm. The dial is calibrated for 100 deg. temperature over a 90-deg. arc.

ciple of manual control within $\frac{1}{4}$ -oz. to 1-oz. overfill.

In common with other packagers of petroleum lubricating oils, Atlantic recognized the importance of closer control of tolerances on overfill. An alert management, ever on the lookout for ways to effect more economic operation, has become more aware of the overfill problem in view of anticipated plant expansions.

By constant spot check-weighing of cans and cases, Atlantic had already been able to hold average overfill within limits of $\frac{1}{2}$ oz. But management was still not satisfied. It considered the possibility of installing equipment to control the temperature of the oil, but this is expensive and complicated for an operation in which as many as 18 grades of motor oils of different types, clingage and temperatures are being packed on the same line.

In its studies, Atlantic got into the question of varying can weights which also lead to variations in the amount of fill, with the result that a can

supplier was asked to assist with the filling problem.

To date, the automatic temperature fill-control device, developed in collaboration with the can supplier, appears to be the most successful solution.

With the slightest adjustments, Atlantic reports that it can actually hold its overfill to tolerances as close as plus or minus 0.1% of an established mean.

The device reportedly controls the temperature changes that occur too rapidly for good manual compensation and enables the quality-control engineer to keep closer check on more accurate fill.

Average cost of the new temperature fill-control device installed is about \$5,000, according to the supplier. In Atlantic's Philadelphia Refinery, the device is integrated with a cam-action filler, although it may be connected with other types of fillers.

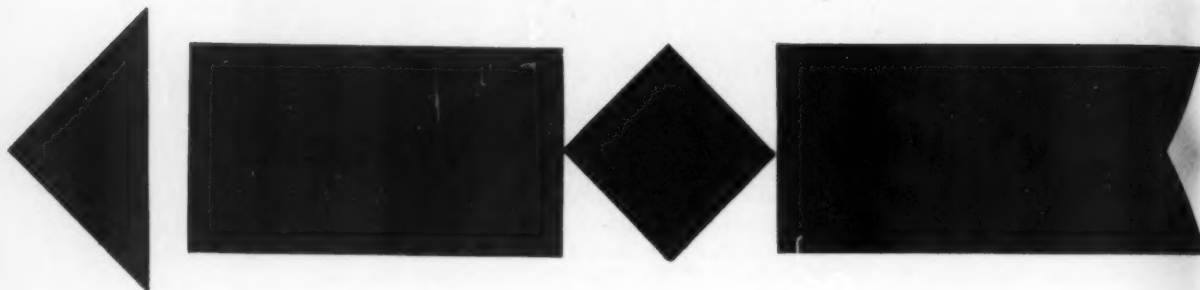
Credit: Temperature fill-control device (patent pending) developed and sold by Crown Cork & Seal Co., Inc., Can Div., Ashton Rd. and Grant Ave., Philadelphia 36, Pa.

Pyramid of Schweppes

Especially during the summer months, soft drinks are well suited to impulse selling in almost any imaginable spot. Schweppes Quinine Water, used in gin-and-tonic and other increasingly popular mixed drinks, has decided to latch onto this trend by developing this low-cost display stand, which provides effective selling room for quinine water in delicatessens, gas stations and other small retail outlets.

The new corrugated stand has room for $4\frac{1}{2}$ cases of Schweppes, or 18 six-packs. These are arranged in pyramid fashion, with six take-home cartons on the bottom layer, five on the next, four on the next and three on top. The display is said to cost considerably less than a conventional wire display rack and has room on the sides and at the top for promotional copy. It is printed in the familiar yellow and green colors featured on the Schweppes label. The display is light enough in weight to be easily moved about a store for related-selling promotions.

Credit: Display by Atlanta Paper Co., 950 W. Marietta St., N. W., Atlanta 2, Ga.



Vinyl-framed bourbon

To give a "de luxe" appearance to a display piece for its Walker's De Luxe straight bourbon, Hiram Walker, Inc., is using this eight-color lithographed illustration in a gilt frame that looks antiqued with age. Actually the frame is vacuum-formed vinyl. The full-color lithographed illustration, itself, which shows a bottle of the whiskey on a silver tray, with ice bucket, glasses and glass candelabra, is mounted on paper-board and fastened to the back of the frame. Over-all dimensions of the display are 27 by 32 in. and it is $1\frac{1}{2}$ in. deep.

A smaller-sized version of this point-of-sale piece measures only $14\frac{1}{2}$ by 18 in. Both frame and illustration of the smaller unit are vacuum formed from the same single piece of vinyl, lithographed in full color. Both displays are equipped with easel backs and with hanging tabs.

And there's a thrift note to the large size. Vinyl "waste" from the picture area was vacuum formed into still smaller frames and bottle toppers.

Credit: Displays by Einson-Freeman Co., Starr & Borden Aves., Long Island City 1, N. Y.



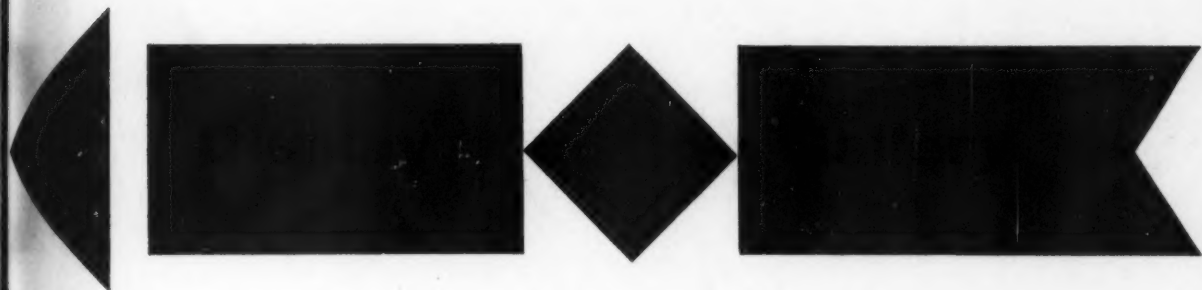
Explosive colors

To get the full impact from magazine advertising, cosmetics manufacturers are turning more and more to the use of point-of-purchase campaigns which duplicate the artwork which appears in printed advertising. This new Cutex campaign by Northam Warren Corp. is typical. To tie in with its series of full-color advertisements in leading consumer magazines, Cutex is now distributing a series of counter and window displays featuring a new color, "Pink T.N.T."

The photograph of the model and headline copy, "Handle with Care, It's loaded with loveliness," plus the tag line, "Beautiful dynamite for lips and fingertips," are identical with those elements as they appear in current ads. By exposing them to customers a second time at the stores where its lipstick and nail polish are sold Cutex feels it will get added impulse sales.

The display pieces, lithographed in full color, come in an assortment of sizes for use in all kinds of locations.

Credit: Displays by Lutz & Sheinkman, 421 Hudson St., New York 11.



Automatic 'thank you'

One of the most novel methods of illuminating a display piece has been incorporated into this new unit developed by Ancient Age Distillers, Inc. When a customer leaves a tip on the bar after being served, the bartender who receives it can drop the coin into a receptacle in this Ancient Age display. Through a patented device, the weight of the coin activates a delayed-action mechanism which causes the words, "Thank you," on a platform below the receptacle to be illuminated.

The glass container is designed to resemble a giant old-fashioned glass and copy on the platform under the "Thank you" sign reads; "A good tip—try Ancient Age." The illuminated display is powered by a small battery and can be surrounded by an array of empty glasses and full bottles.

The unusual device, believes Ancient Age, will serve two purposes: to act as a conversation piece for bar customers and to build good will among the nation's bartenders, who, Ancient Age hopes, will subsequently recommend this brand.

Credit: Display by Display Guild, 85-09 57 Ave., Elmhurst, N. Y.



Announcing DURACOTE

*— a development of
major importance to*

glass container users

After 22 years of research, Owens-Illinois has developed a *universal* surface treatment for glass containers—the first container coating method considered worthy to become a part of the Duraglas technique of glass container manufacture.

The new DURACOTE treatment developed in the Owens-Illinois Technical Center, combines *for the first time* protection, non-toxicity and durability *with ease of labeling*.

During this period, our technicians have experimented with all types of surface coatings—from water soluble waxes to silicones. Many of our customers have used these coatings and found them to be effective in preventing surface scratching.

However, the invisible protective coating produced by the new Duraglas container treatment far surpasses all other types of surface treatments in durability and ease of labeling and filling. In addition, because it is non-toxic, this new treatment can be used on containers for a wide range of products.

DURACOTE is available *now*.

*Call the Owens-Illinois branch office
nearest you for complete details.*

DURAGLAS CONTAINERS
AN **(I)** PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

Vacuum in a folder

*Scott Petersen achieves better merchandising
for flexible vacuum packages of sliced luncheon meats
by sealing each in a die-cut window folder*



Three dimensional effect is gained by having stacks of slices, vacuum sealed in polyethylene-cellophane lamination, protrude through die-cut opening in folder. Green border sets off color of meat. Shown are folder (thermoplastic coated) and warning slip packed in shipping case.

By heat sealing a die-cut paperboard folder around a conventional polyethylene-cellophane vacuum pouch containing sliced luncheon meats, Scott Petersen & Co., Chicago, has come up with a finished package having greatly improved company and product identity, increased product protection and greater display opportunities at the point of sale.

Combining several of the desirable features of a vacuumized film pack and those of a folding carton, these new packages have been an important factor in enabling the company to extend its distribution to a number of additional retail food outlets which handle pre-sliced luncheon meats.

They are representative of what appears to be a trend toward combining a paperboard outer pack with an inner flexible vacuum package.

Previously, Scott Petersen, a well-known independent producer of sausage and meat specialties, confined its interest to complete sausages, meat loaves, etc., which were sliced for ultimate sale by the retail meat or food-store outlet. With the addition of the new line of pre-sliced products, the company is now in a position to handle both types of distribution. Initially, 12 of the firm's most popular types of sausage and loaf items are available in the new 6-oz. net weight vacuum packages.

Before deciding upon this new style of package, the company made a thorough study of consumer buying preferences, store display practices and related merchandising considerations. A vacuum type of package was decided upon because it was felt that such a package would provide a safe shipping and display period of at least 10 days for the sliced product. However, the company also introduced some ideas of its own to give the packages maximum merchandising effectiveness.

Exceptional product visibility is one of the outstanding advantages of the new Scott Petersen vacuum packs. Instead of seeing only the top slice on the stack, or a printed facsimile of the product, the customer can see the entire stack of slices through the transparent vacuum pouch. The color of the



Display value is demonstrated by this typical display-case scene. Packer provides wire rack in which packages may be displayed upright, with variety and price clearly in shopper's view.



Packaging starts with two girls sliding stacks of slices into film bags, using a mandrel. Conveyor line moves to the right.

meat is effectively set off by the green scalloped border around the edge of the die-cut opening framing the sealed pouch. The same color combination—light green and red—is carried out on the oval-shaped pressure-sensitive labels placed on the front of each transparent package. These labels help to establish company identity, yet are not so large as to obscure the view of the meat itself.

The use of the printed die-cut paperboard folder gives the package a number of "plus" features. In the first place, the top and bottom edges of the folder conceal the margins of the vacuum pouch, at the same time affording an ideal location for the name of the producer, the specific name of the product and a price patch, along with the "vacuum packed" designation, the inspection legend and a listing of ingredients on those products where this information is required. In addition, the entire back surface of the folded card provides ample space for illustrated directions on opening the package (by slitting around the base with a knife), along with serving suggestions for the meats in salads and as appetizers.

The use of the printed paperboard folder gives all of the Scott Petersen packages uniform size and shape, regardless of whether the slices themselves are round or square. It also lends additional rigidity to the packages and provides a sturdy, easily



Vacuum sealing is done in latest two-head machine. Optimum speed is 30 packages per min.



Folder is placed around each package by hand, using a jig. Pressure-sensitive "Scott Petersen" labels are affixed to face of each film package.



Final heat sealing of the printed folder around film package is done in this compact machine that code dates one edge of the package.

grasped surface for self selection of the products directly from refrigerated display cases.

Further increasing the convenience of the package, from the customer standpoint, is the fact that Scott Petersen provides retail outlets with compartmented stainless-steel wire racks in which the packs are stood upright, with the company name, specific product name and sales price clearly visible across the top. In contrast to the customary horizontal stacking used for products of this type, this "filing-case" style of display keeps the packages in an orderly arrangement, facilitates efficient stocking and ordering, and saves time for the hurried consumer. With packages standing upright, it is almost impossible for "out-dated" packages to become buried or lost in the shuffle. Vertical display also facilitates circulation of air around the packages in the case.

In the Scott Peterson plant, the meat loaves and sausage items are first sliced and shingled by a semi-automatic slicing machine. Slices then move via a short conveyor to an operator who check weighs the stacked slices to make up the required 6-oz. portions. Working as a team, two operators slide the pre-weighed slices into the open end of the polyethylene-cellophane pouches, which are slipped over mandrels to facilitate the loading process.

Next, the pouches are carried by conveyor to a third operator, who is stationed at the two-head semi-automatic vacuumizing and sealing machine. This operator places the packages alternately in the two heads of the machine, which is set for an optimum output of approximately 30 packages per minute. Each evacuated and sealed package drops automatically from the machine as the hinged heads open at the end of the cycle.

Later, with the addition of another slicing machine, this operator will devote full production time to loading of the vacuumizing unit. At present, after a sufficient supply of bags has accumulated, the operator moves to the [Continued on page 244]

Credits: Semi-automatic slicing machine by U. S. Slicing Machine Co., La Porte, Ind. "Speedweigh" scale by Toledo Scale Co., Toledo 1, Ohio. Polyethylene-cellophane vacuum pouches and Model 69CLG twin-head vacuumizing and sealing machine by Standard Packaging Corp., Flex-Vac Div., 551 Fifth Ave., New York. "Advac" die-cut backing boards for vacuum packs by Marathon Corp., Menasha, Wis. Heat-sealing unit for "Advac" boards by Great Lakes Stamp & Mfg. Co., 2500 W. Irving Park, Chicago; leased through Marathon Corp. Pressure-sensitive labels by Shuman Labels, 600 W. Jackson, Chicago. Label dispensing machines by Derby Sealers, Inc., 575 Madison St., Derby, Conn. Stainless steel wire racks for retail display cases by Midwest Wire Specialties Co., 2743 N. Pulaski, Chicago. Package design program by Norbert F. Schwarz, 49 E. Oak, Chicago.

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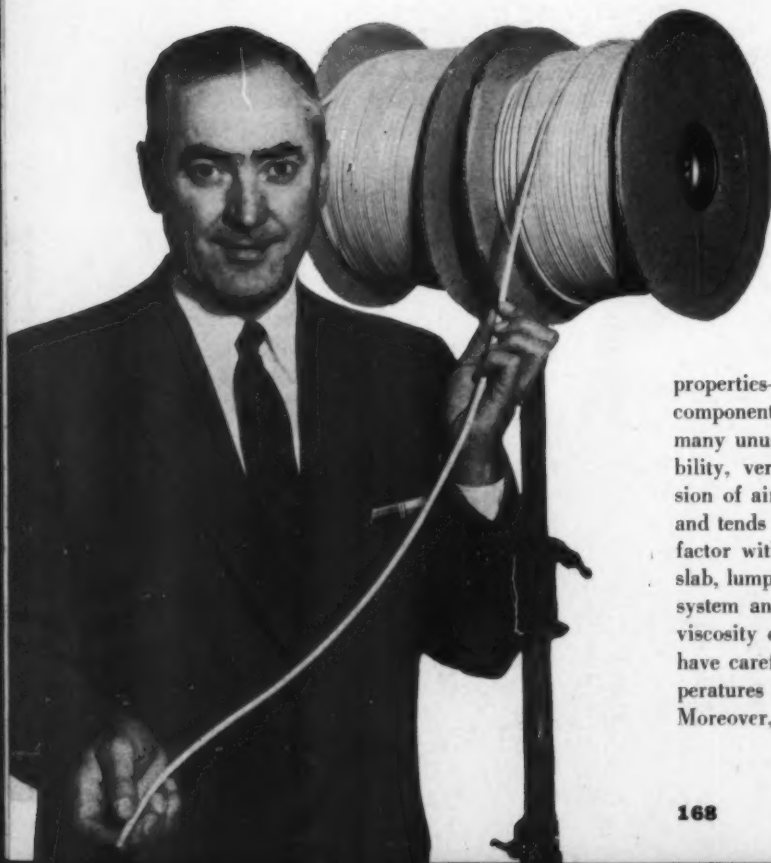


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469-483 King St. W., Toronto, Canada

Slide box manufactured
for Stephano Brothers,
Philadelphia, Pa.

Adhesive on a reel

In rope form, new thermoplastic adhesive is melted and applied as needed in a high-speed machine that sets up Duvernoy's bakery trays from flat blanks



A thermoplastic adhesive in an intriguing new form—something which has been long talked about and more than five years in development—has now made its official debut in the packaging field.

The adhesive is supplied in the form of a flexible, continuous, rope-like coil. It is fed into a specially adapted carton-forming machine, where a small amount is melted, as needed, at high temperature. One of the early users of this adhesive and machine is Duvernoy & Sons, Inc., New York, for setting up simple paperboard trays for its brown-and-serve rolls and bread.

This new rope-type adhesive presents very interesting possibilities for package users. It eliminates the labor cost of filling and cleaning glue pots and glue supply lines on machines. It assures a clean gluing job. It opens a whole new field for thermoplastic adhesives.

The rope adhesive eliminates the conventional glue pot, because the rope is fed into a unique applicator equipped with proper heat controls and a gravure glue wheel. Only enough adhesive is melted to supply immediate needs. Thus the packager can stop the machine at any time and then start it again the next day or next week without any problem of clean-up, adjustment of the adhesive or waste.

The rope form makes use of the hot melt's best

Coiled like a rope, new thermoplastic adhesive is in solid, dry form until melted in carton set-up machine at high temperature, eliminating glue pots or supply lines.

PHOTO COURTESY UNITED SHOE MACHINERY CORP.

properties—high speed, total absence of volatile components, very quick set and capacity to provide many unusual properties including controlled flexibility, verminproofing, rust resistance and exclusion of air, water, oil or other foreign materials—and tends to minimize its disadvantages. A limiting factor with the conventional hot melt, supplied in slab, lump, pellet or other bulk form, is the heating system and the need for careful control. Hot-melt viscosity depends on temperature, but if you don't have careful control there is charring at high temperatures or premature setting at low temperatures. Moreover, it is difficult, it is said, to avoid some

degree of decomposition when hot melts are heated for long times.

This is not meant to imply that hot-melt problems have not been dealt with satisfactorily. The point is that the rope form provides a new means of avoiding the limiting factors to which conventional hot melts have been subject.

For the Duvernoy company, this rope-form adhesive and unique applicator permit the use of a relatively inexpensive machine that takes flat, printed carton blanks, simultaneously forms them into trays and glues the four corners. The finished trays are deposited directly onto the filling line, all operations being automatic.

For other packagers, there are many implications: with the use of this solid, hot-melt form, the range of formulations for thermoplastic adhesives is greatly extended. With the use of this new automatic machine, it may now become economical for a company to switch to in-plant carton forming.

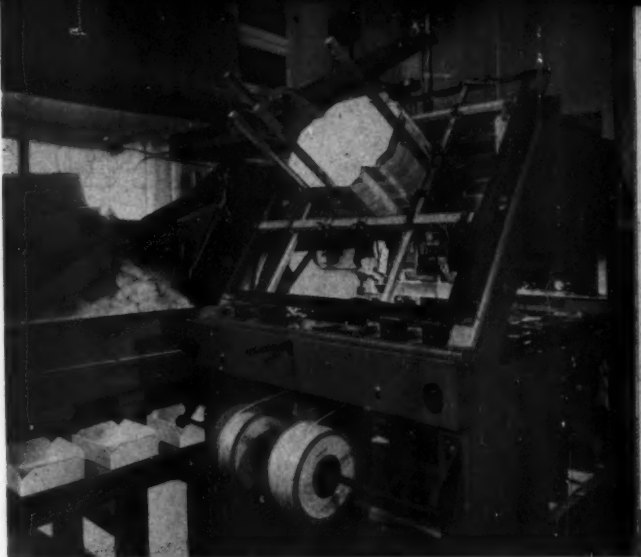
The revolutionary new adhesive form was originally developed for use in the making of shoes, where a cement that would make a quick, strong bond to hold springy leather fibres together and set in less than 1/30th of a second was needed. As this material eventually was formulated, it is an extrusion in the form of a solid rope about 3/16 in. in diameter. Each pound of the coiled adhesive is said to yield, when melted, an adhesive band 40,000 in. in length.

Duvernoy uses four 3-lb. coils of the adhesive at a time. Each one feeds separate applicators on the machine which are located opposite the four corners of the tray. The end of each coil feeds into the thermostatically controlled applicator housing, which raises the temperature to about 320 deg., or enough to turn it into a liquid adhesive.

Once it is in the liquid state, a gravure-type transfer wheel applies the adhesive directly to the side walls of the carton blank. The glue pattern is a series of short parallel lines, corresponding to the indentations in this wheel. Each side wall of the Duvernoy cartons requires a 2-in. glue pattern of this type. The length of the glue pattern is always equal to the depth of the carton.

In the carton-forming machine, flat blanks are loaded into a magazine at the top and are fed into position by means of a vacuum-operated transfer system. The blank is centered under a mandrel, which then drops down and causes first the side walls, then the end walls to bend upward on scored lines. As this occurs, the four revolving glue wheels apply an accurately metered glue pattern to each corner of the side walls.

The glued flaps are then sealed to the outside of the side walls, giving the tray's interior a smooth,



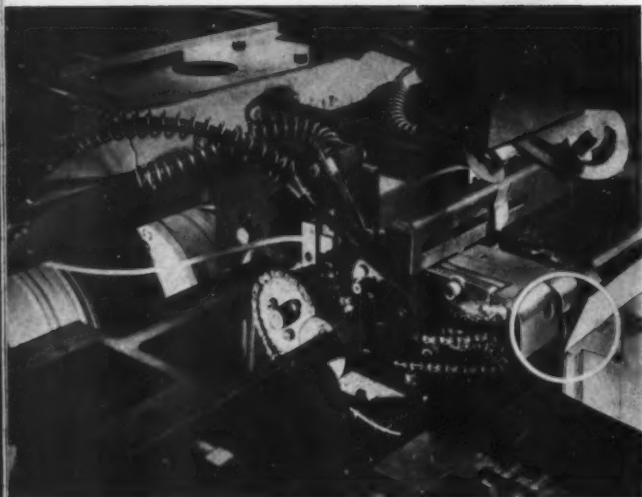
Carton former in Duvernoy Bakery uses flat carton blanks, which are sealed with adhesive from four reels (two on opposite side). After trays are set up and corners glued, they pass out of bottom of machine directly onto filling line at left.

unbroken inner surface. This done, the finished tray immediately drops to a short moving conveyor which deposits it directly onto the packaging line.

Duvernoy is currently running the machine at a speed of from 34 to 40 trays per minute. However, speeds up to 100 trays per minute are said to be possible. Two different tray sizes are used and change-over from one to the other can be accomplished in from 8 to 10 min. The change-over time

Ready for gluing, carton blank gripped by vacuum cups is positioned under mandrel, which comes down to force up the end and side walls.





Key section of new machine is shown in this close-up of one of four gluing mechanisms. Rope-form adhesive from coil at left passes through two thermostatically controlled heating units to be converted into liquid. Gravure-type glue wheel (circled) applies liquid adhesive to carton's side walls.

is determined by the degree and number of carton-dimension variables.

As the trays leave the forming machine. They move along a belt conveyor that runs parallel to the conveyor carrying half-baked brown-and-serve rolls. The rolls are hand placed into the trays, which then pass down the line to be automatically over-wrapped and sealed in cellophane.

Duvernoy has been using this new in-plant tray-forming machine for several months for a line of packaged baked products. The company estimates that, when the new trays are adopted for all its products, it will be using more than a million of them every year.

In the light of its experience thus far, Duvernoy can point to an impressive list of advantages for the new trays and the new machine. According to Frederick Brignola, industrial engineer with Duvernoy, these are:

Cartons. Flat, printed blanks are less expensive than the previous package, an "in-fold" type tray which was supplied to Duvernoy pre-glued and folded flat. The new cartons are better looking and more rigid, since they do not have the diagonal corner creases found on the in-fold type. Shipping is cheaper and storage is simpler, since the flat blanks in their shipping cartons take up only about half the space of the same quantity of the old, pre-glued cartons.

Packaging line. The company's entire packaging operation is simplified, since the carton-forming machine can be integrated precisely with the filling process: Trays are set up and glued only as they

are needed, with the speed being adjustable. Less manpower is needed, since the machine operates automatically and must only be refilled with a new supply of carton blanks and new coils of adhesive. And less supervision over the men loading baked goods into the cartons is necessary, since their work must now be geared to the speed of the carton-forming machine.

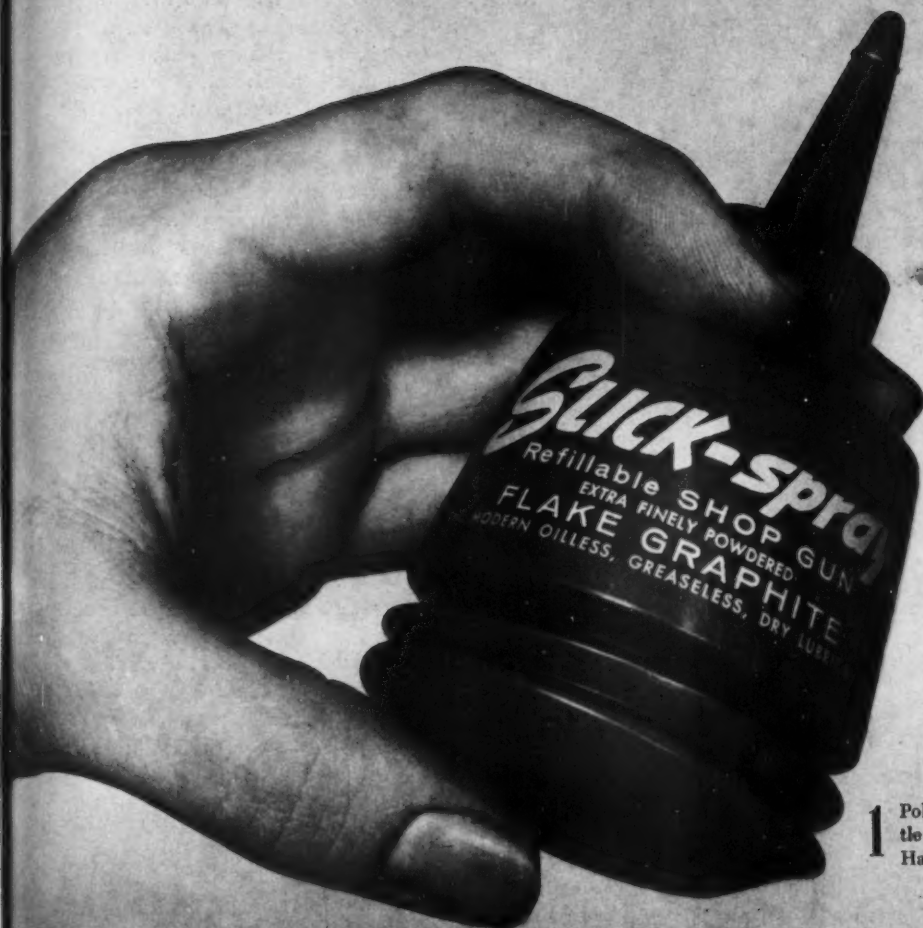
Russell E. Duvernoy, in commenting on the company's experience with the rope adhesive, says: "Use of the new machine and the new form of adhesive has contributed to a packaging operation that over-all is more satisfactory and more economical. Bonding performance has proved good, with margin to spare."

Although Duvernoy & Sons has been the first to adopt this new adhesive form and new carton-forming machine for a packaged product, the equipment is now operating in several different fields, including candy, molded plastics, bakery, stationery and paper cups.

Interest, apparently, is growing rapidly among other companies which could well take advantage of a machine which takes flat blanks, sets them up and glues them as needed, without having glue pots to be filled or cleaned or glue drums to be stored, and uses a thermoplastic adhesive that is available in a very convenient form, can be metered accurately and used in small quantities as it melts. The principle is, of course, as readily applicable to complete cartons as to trays. For such fields as frozen foods, to which these two new developments offer the rigidity of a glued carton plus the operating simplicity of a lock-type carton former, the possibilities may be quite interesting.

In addition to its use in the new carton-forming machine, the rope-form adhesive also opens up some other new packaging avenues. Since its hot-melt, rapid-setting characteristics make possible the employment of a wide range of thermoplastic formulations, adhesives of this type can be used for bonding a variety of materials, including kraft and other papers, polyethylene film, polyethylene-coated boards and papers, some waxed papers, aluminum foil-laminated board and paperboard of all types. With the development of special applicators, it is already in use by a number of manufacturers of bags. Speeds up to 500 ft. per min. are said to be possible when the adhesive is used on continuous-web materials.

Credits: "Thermogrip" rope-type adhesive by Industrial Sales Division, United Shoe Machinery Corp., 140 Federal St., Boston, Mass. "Traymaster" TL100 carton former by Package Machinery Co., East Longmeadow P. O., Springfield, Mass. Carton blanks by Associated Folding Box Co., Lawrence, Mass.



1 Polyethylene "Slick-spray" bottle molded by Plax Corporation, Hartford, Conn.

*How 4 different types of packaging
made with BAKELITE Brand Plastics can help you*

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For instance, here's a bottle with a "built-in bellows." It's smart. It's functional. Catches the eye . . . and easy to use. It's an improvement over yesterday's way.

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(continued on next page)

Combine sales appeal and utility

(continued from preceding page)



2 Polyethylene bags for Dennisons 'Starletta' bouffant slips are supplied by Bemis Bro. Bag Co., St. Louis, Mo.

this polyethylene bag is a "big plus for retailers"

Dennisons of Glens Falls, N. Y., tells both sides of the story, after packaging in film made of BAKELITE Brand Polyethylene.

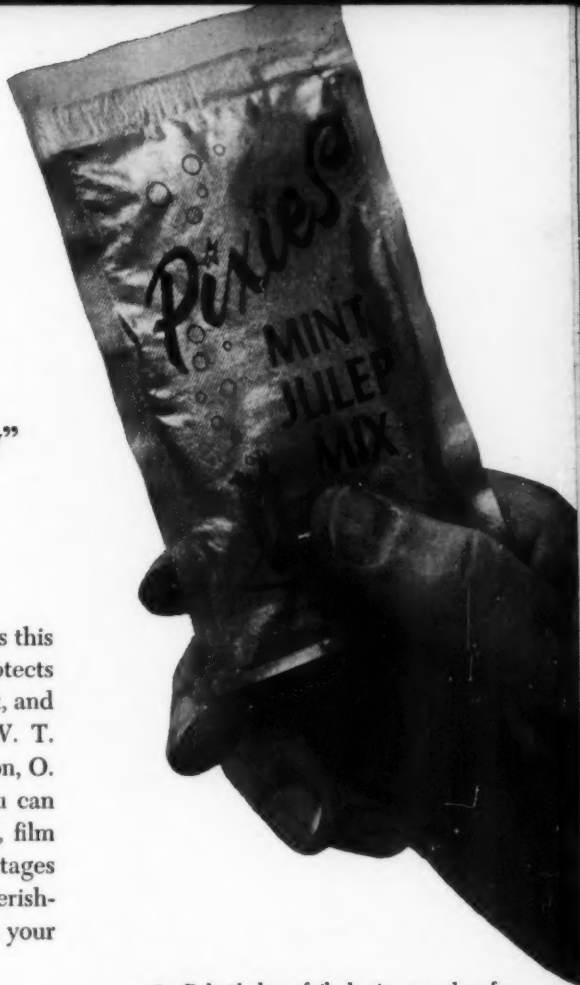
Sales appeal? "The soft smooth feel of the bag imparts the sense of intimacy usually associated with delicate lingerie."

Utility? "There's a home storage problem with crisp swirling creations. Our newly-designed bag boasts an eye-catching strap. The slip or crinoline can now hang thoroughly protected in the closet without taking up undue space. Stores easily in the stock room, too."

"Our quick mix stays fresh and dry"
in handy pouches
inner-coated with polyethylene

"An inside extrusion coating of polyethylene puts this inert material right next to the contents. It protects the purity of flavor, keeps moisture definitely out, and provides a dependable heat seal," explains W. T. Troutman, president of Tromar Corp., Mt. Vernon, O.

This is only one type of coated package. You can use polyethylene coatings on paper, metal, foil, film and other package materials. Tremendous advantages are yours in marketing liquids, powders and perishables of just about every kind. Find out from your supplier all the ways he can help you benefit.



3 Polyethylene foil-glassine pouches for Tromar Corp. are made by Shellmar-Betner Flexible Packaging Division of Continental Can Co., Mt. Vernon, O.

*Ask your supplier
about . . .*



Combine sales appeal and utility

(continued from preceding page)



4 Laminated package for "Lilt" is made by Arvey Corporation, Chicago, Ill., and Dobeckmun Company, Cleveland, Ohio.

Unusual two-in-one pouch gets "three-sided" protection

Laminations of KRENE Cast Vinyl Film to foil serve in this two-compartment package for Procter & Gamble's "Lilt" hair preparation. The pouch is divided into two sections on the inside each holding a powder. (The two powders must be kept separate until mixed for use.)

The cast vinyl film is laminated on the inside of the big envelope, and on both sides of the inner "divider." Thus, only this chemically resistant, air and moisture tight film is touched by the contents . . . assuring that the product will score a hit with users.

You should investigate all these ways of providing better working, better sales-building packaging for your products by using materials made with BAKELITE Brand Plastics. See your packaging supplier, or write for our "Packaging Guide" to Dept. SQ-105.

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Tablet-dispensing can

Turning a knob in base releases salt tablets one by one from 1,000-tablet, wall-mounted can, designed to combat heat exhaustion in the factory

It is unusual to find a company specializing in industrial safety equipment distributing a drug product. But considering that heat exhaustion is one of the greatest summertime safety hazards in most factories, an effective means of encouraging workers to take salt tablets regularly was part of the job for E. D. Bullard Co., San Francisco.

Most unusual is the functional package developed by Bullard to sell the idea as well as the product, using a dispensing principle that should be adaptable to many other tablet-shaped products.

The cylindrical container is especially designed to hold 1,000 orange-impregnated, non-nauseating tablets that quickly eject one at a time when the chemical-resistant knob at the bottom is turned.

The package is shipped with a regular plug lid in the bottom. For dispensing this is removed and replaced by a special dispensing lid. The latter is comprised of another metal plug lid equipped with a molded phenolic plastic knob and disk with four circular openings through which the tablets are dispensed one at a time by gravity when the knob is turned to move the disk over a matching opening in the metal plug closure. A metal arm on the inside of the dispenser keeps the tablets from piling up on the inside. The dispenser is made in such a way that there is little play of the mechanism and keeps the salt tablets from breaking up.

A brightly colored 9½-by-7-in. paperboard wall hanger comes with each dispenser, along with a metal wall grip. Six of the throw-away salt-tablet containers and dispensers are packaged with the wall boards and metal grippers in a shipping carton.

Credits: Dispensers by Crescent Products Co., San Salito, Calif. Containers by Fibreboard Products, Inc., 1789 Montgomery St., San Francisco 11.

Mechanism consists of metal plug closure, phenolic plastic knob and disk with four circular openings, through which salt tablets are dispensed one at a time by gravity when the knob is turned to move disk over matching opening in metal closure. Metal arm keeps tablets from piling up inside container.



Dispensing stations throughout a factory are provided for employees by affixing salt-tablet dispensing cans to a paperboard wall poster by means of metal wall grips.





controlled packaging*



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Machine handling of polyester film

*A report on development work that has solved problems
of static and heat seal, and adapted
this important new film to mechanized wrapping*

*By D. D. Phillips
and L. L. Schoening**

Polyester film (Mylar¹) is a new transparent film of exceptional interest in packaging because of its great strength, clarity and excellent aging qualities (1).² Yet, until recently, its use in mechanized packaging operations was limited because of static problems in feeding and because the film would not yield to conventional mechanized heat-seal methods.

Experimental work has established, however, that static can be eliminated and that effective heat seals can be made with this film if the sealing area is first softened with a solvent. Modifications of standard cellophane-overwrapping machinery to accommodate these techniques have been worked out and commercial operation has proved the practicability of the method (2).

This report details some of the findings during the course of this development work.

The material

Polyester film is particularly desirable for difficult overwrapping and bundling applications because of its high strength, clarity, long shelf life and abrasion resistance. Shipping tests have shown that polyester film in such applications has durability far superior to other transparent packaging films.

Film performance tests have proved that age, humidity variation and cold weather do not affect the durability of the wrap.

Polyester film will not shrink or warp the package because it is dimensionally stable from minus 80 deg. F. to 300 deg. F. On products requiring long shelf life and of such weight that cellophane would not be considered, the required job can be done

Pencil points to high-voltage static-eliminator bar as used on a Scandia fully automatic carton-overwrapping machine; another similar bar is located on opposite side of film after sheet cut-off. This, plus the use of benzyl alcohol as a solvent, makes heat-seal wrapping operation possible on this and other types of standard machines.

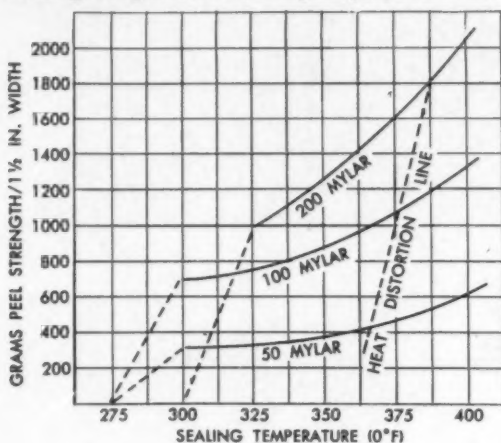


*The authors are with the Sales Development and Technical Service Laboratory, Film Dept., E. I. Du Pont de Nemours & Co., Inc., Wilmington, Del.

¹The polyester film referred to throughout this article is Du Pont's film trademarked "Mylar." Du Pont is the sole producer of polyester film in this country.

²Numbers in parentheses identify "References" appended.

Typical seal-peel strength vs. sealing temperature for Mylar polyester film



using polyester film. In shipping tests involving as many as 100 handlings in transit, wraps with this film remained 100% salable even though these tests were more severe than could be expected in normal commercial distribution.

Half-mil and one-mil Mylar can be used on standard cellophane packaging machinery with good results when necessary changes have been made for film feeding, folding and sealing. These changes are described in detail in the following sections.

The information has been gathered from tests at the Du Pont Film Department's Chestnut Run Laboratory, from tests by package machinery manufacturers and from field tests at locations throughout the country.

Film feeding

Two problems are encountered in feeding polyester film on automatic packaging machinery. The first and most important is static elimination. Because of its excellent dielectric properties, the film can retain high surface charges for long periods of time. These surface charges are generated in unwinding, slitting, rewinding and again unwinding the film in final use. Static charges cause the film to be attracted or repelled by metallic parts of machines and prevent it from being pushed beyond feed rolls.

It has been found that high-voltage, air-ionizing-type static eliminators placed near the unwind and near the cut-off knife have been highly successful in eliminating static charges. This has made it possible to feed half-mil polyester film at top machine speeds. It has been observed that static problems are accentuated by low relative humidities and in these cases the placement of static-elimination bars is critical. However, even at very low humidities, properly placed static bars will permit feeding at normal rates.

If problems develop because of poor film-to-metal slip, all metal surfaces in the feed channel can be covered with glass cloth impregnated with Teflon tetrafluoroethylene resin. This provides a good surface for film slip. The cloth can be applied to the metal with two-side-coated pressure-sensitive tape.

A second consideration of film feeding, but of less importance than static elimination, is the film cut-off knife. Polyester film, because of its toughness, is more difficult to cut than cellophane. Experience indicates that standard knife alloys used on cellophane machines can be used satisfactorily for cutting polyester film; however, the knife must be carefully sharpened and well adjusted. Shear-type cuts are preferred to score cuts. Proper wrapping of the sheet around the package cannot be accomplished if good, clean cuts are not obtained. Improper cut-offs may cause wrinkles in the next sheet so that feeding becomes difficult or impossible.

Folding

Although polyester film is a very rigid material, in half-mil thickness (50 gauge) the sheet does not exhibit the stiffness associated with cellophane. When using this thin film, machine folders and tuckers may present some problems that are not encountered with cellophane. It is important that the folders and tuckers be carefully adjusted so the film is held in place once the folds and tucks have been made. To prevent wrinkles and overlaps, it may be necessary to change the folder shapes on some machines to generate the folds in a more gradual manner. On other machines, standard folders have performed satisfactorily. Proper folder shapes are, of course, a function of the size of the package to be wrapped and each case should be carefully studied. In one case it was found that a small air jet assisted in raising the film to the proper position before making a fold.

Loose wraps were formed on one machine model because high-speed product movement through the machine caused air turbulence which in turn caused poor film feed. Air turbulence can be minimized by properly venting the areas and installing baffles to limit air flow.

Heat sealing

Polyester film in normal packaging-film thicknesses can be sealed by the solvent action of benzyl alcohol and heat. At room temperature, benzyl alcohol has no effect on the film. However, when sufficient heat is applied, the benzyl alcohol softens the surface of the film, is evaporated and forms a weld-type seal. Seal strengths in shear are obtained in excess of 7,000 gm. per 1½-in. width. Peel strength is in the order of 500 gm. per 1½-in. width.

Table I: Mylar polyester film sealed with benzyl alcohol, typical seal-strength change with time and exposure conditions, seal-peel strength in gm. per 1½ in. of seal width

Film	Time	Room	20%	80%	Steri-	0° F.
		condi-	R. H.,	R. H.,		
		tions	72° F.	72° F.	lized*	
50 Mylar	3 days	400	310	330	310	440
	6 mo.	350	370	410	400	400
100 Mylar	3 days	700	870	900	410	1030
	6 mo.	710	900	680	570	1080
150 Mylar	3 days	1080	1100	1130	1120	1120
	6 mo.	1140	1100	1000	1060	1000
200 Mylar	3 days	2140	1840	2110	730	1740
	6 mo.	1700	1300	1560	760	1300

*Sterilized—exposed to 15 psi steam for 30 min. before storage at room conditions.

As shown by the data in Table I, seal strength does not deteriorate with aging conditions.

Sealing polyester film with benzyl alcohol is a two-step operation: (a) applying the benzyl alcohol and (b) heating the seal area to the proper temperature. Typical seal-peeling strength vs. sealing temperature is shown in the accompanying graph.

Benzyl alcohol can be applied with either wheels or wicks. Both methods have been used and are satisfactory. Small quantities of benzyl alcohol produce the optimum seals. If excessive quantities of solvent are used, there is a possibility that the un-evaporated solvent will reduce the actual sealed area, resulting in somewhat weaker seals. However, the seal strength does not deteriorate in the presence of benzyl alcohol. If too little benzyl alcohol is applied, reduced seal strengths result.

Benzyl alcohol ($C_6H_5CH_2OH$) is a colorless, oil-like liquid with a mild, pleasant odor and a sharp taste. Technical literature (3, 4) indicates that it is not considered a toxic chemical. The Food & Drug Administration of the U. S. Dept. of Health, Education & Welfare has accepted data submitted on polyester film (Mylar) sealed with benzyl alcohol as showing packages sealed by this method are acceptable for food and drug packaging up to 250 deg. F. Benzyl alcohol has a vapor pressure of 0.15 mm. Hg. at 25 deg. C. and thus evaporates much more slowly than water in open containers at room temperatures.

Benzyl alcohol readily wets the surface of polyester film and spreads appreciably when two layers of film are brought together. It is not tacky to film or machine parts with which it makes contact.

Benzyl alcohol is an excellent paint and ink remover, and therefore it is important not to use ex-

cessive quantities, to prevent wetting and bleeding of printed areas on the film or product.

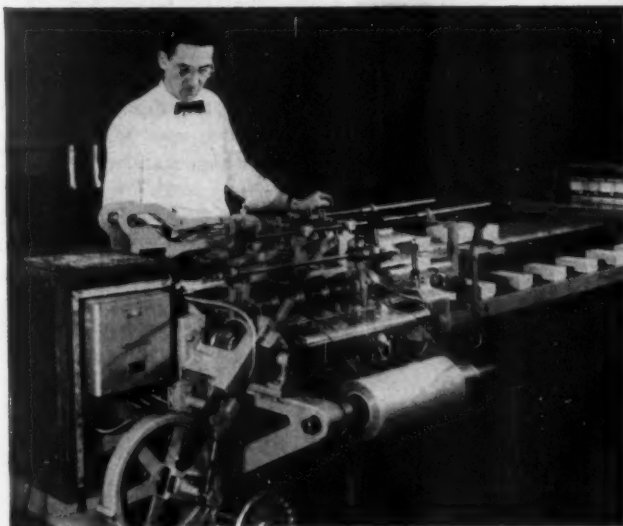
In heat sealing polyester film with the aid of the solvent action of benzyl alcohol on standard packaging machines, film temperatures of 335 to 385 deg. F. are required. Actual heater-plate temperatures may exceed this, depending upon the contact pressure with the sealer plate and the length of time the package is exposed to the heater. Heater temperatures above 400 deg. F. have been used on high-speed machines. The range of temperatures that effect a seal is relatively narrow and heater temperature control within plus or minus 10 deg. F. is desired. In some cases, heater plates also have been coated with tetrafluoroethylene resin to improve seal appearance and prevent sticking.

The machine changes outlined above—including static elimination, cut-off knives, folders, solvent applicators and heaters—have resulted in very satisfactory operation of carton overwrap and bundling machines with polyester film. These modifications are fairly simple in scope and can often be made in the field. In specialized cases, more extensive machine changes may be indicated and these can be done by the manufacturer.

References

1. "Polyester Film Is Here," MODERN PACKAGING, July, 1955, p. 98.
2. "Bundling in Polyester Film," MODERN PACKAGING, April, 1956, p. 89.
3. Patty, *Industrial Hygiene and Toxicology*, Vol. 2, 1949, p. 874.
4. Merck Index, 5th Ed., 1940, p. 27.

Experimental operation of Hayssen overwrapping machine in Du Pont laboratories on polyester film, using static eliminators and benzyl alcohol as a solvent prior to heat seal. Such packaging machines are now in commercial use.



Moisture control in sugar

Studies resulting in a better carton liner for brown sugar show how testing set-ups can be improvised to solve a particular packaging problem

By L. G. Joyner*

Compared with those of other food and food-mix producers, the packaging problems of the sugar refiner are relatively minor. Refined granulated sugar, providing it is properly dried, presents no serious protection problem. Sales appeal, rate of production and economy are the primary considerations. Economy is important, since sugar is generally handled on a bulk, low-margin basis.

Most refiners, however, produce at least one or two specialty items, such as brown and powdered sugar. These sugars have a considerable tendency to form a hard cake. The prevention of such caking, to maintain customer good will, is a serious packaging problem.

Sugar is seldom delivered direct from the refiner to the retailer, but frequently passes through two or more warehouses before it appears on the store shelf. Invariably, the sugar will leave the refinery in good condition; caking occurs during transfer and storage at various warehouses and, therefore, must be due to either a time-dependent process or exposures to unfavorable conditions in transit.

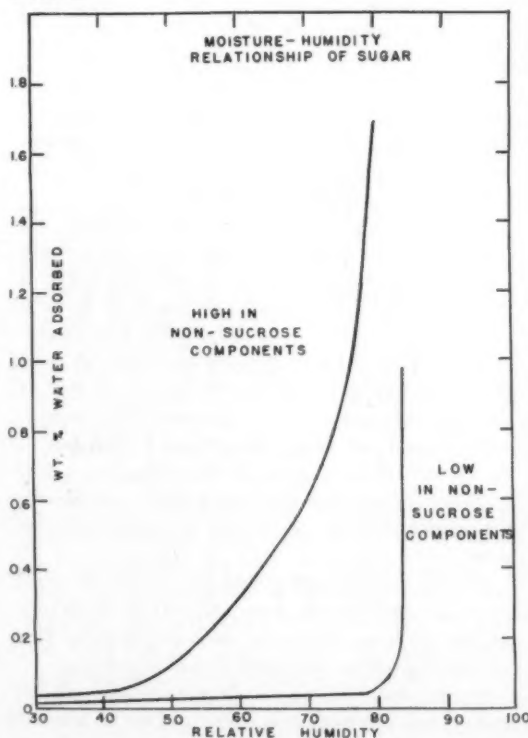
Mechanism of caking

The mechanism of cake formation in sugars is quite well understood, although details may not have been completely worked out. In general, sugar is a relatively pure crystal of sucrose with any non-sucrose material forming a coating on the surface. Similarly, the moisture content of the sugar is almost entirely in the form of an adsorbed surface film. The composition of this moisture film will, of course, be that of a saturated sugar solution with other soluble non-sugar components dissolved in it to various extents, depending upon the nature of the sugar. The water-vapor pressure of this film will depend on the sucrose concentration, the nature and concentration of the other solubles present, and the temperature. At equilibrium, the vapor pressure of the film must be equal to the vapor pressure of the surrounding atmosphere, which is a function of relative humidity and temperature.

The equilibrium relationship between the quan-

tity of moisture adsorbed and the relative humidity is a typical adsorption isotherm. Fig. 1 shows a typical water-adsorption isotherm for a high-purity sugar and shows the effect of non-sucrose components on the isotherm. Since the non-sucrose components decrease the vapor pressure of the adsorbed water film, they also depress the shape of the isotherm toward lower relative humidity. Very little information is available with regard to the rate at which equilibrium is established. At one time it was thought that this rate was very slow, but more recent studies indicate that a near equilibrium condition is reached relatively rapidly, with a slow approach to the final equilibrium.

FIG. 1



*Director of Research, Godchaux Sugars, Inc., Reserve, La.

Sugar solutions can also exist in highly supersaturated states even in the presence of sugar crystals. Furthermore, they tend to solidify in an amorphous or glass-like form rather than in a crystalline form. This is particularly true when non-sucrose components are present in high concentrations.

Although this characteristic is a desirable one in candy making, it contributes to the cause of caked sugar. If the sugar has a high moisture content, due either to the method of production or to exposure to high R.H., its equilibrium position will be at the right of Fig. 1. In this condition, the adsorbed film will be a relatively thick layer of saturated solution. Since there are many points of contact between crystals, the mass of the sugar can be considered to be an almost continuous three-dimensional network of saturated solution, with the sugar crystals imbedded in the interstices.

The caking mechanism is now fairly obvious. When the above sugar is exposed to an R.H. lower than its equilibrium point, the moisture in the film will pass into the atmosphere, leaving behind a supersaturated solution. No particular harm would be done if the dissolved sucrose crystallized slowly onto the surface of the crystal. But, if the conditions are such as to cause the supersaturated solution to solidify into a glass, the whole mass fuses together into a hard lump. Further drying only makes the mass harder.

Refined granulated sugars are high purity, low in non-sucrose components, and their moisture-

Table 1: Description of liners
(Initial screening run)

Liner Type	Paper	Paper weight		Wax weight		Finished weight
		#/ream ¹	#/ream ¹	#/ream ¹	#/ream ¹	
A ²	Single	Sulfate	30	12		42
B	Single	Glassine	37	6		43
C	Single	Super-calendered sulfate	26	7		33
D	Single	Super-calendered sulfate	31	8		39
E	Laminated	Super-calendered sulfite	2-20	7 ³		47
F	Laminated	Glassine	2-25	7 ³		57
G	Laminated	Glassine	2-20	7 ³		47
H	Laminated	Glassine	2-20	7 ³		47
I	Laminated	Sulfate-foil-sulfate	(See note 4)			79

¹24x36—500 ream.

²Liner A was the paper in current use.

³The wax in the laminated liners was between the two sheets of paper.

⁴The component materials of this liner consisted of a sulfate or kraft paper laminated to aluminum foil and that in turn to a light-weight sulfate tissue, the papers being on the outside, with the foil in the center.



Fig. 2. Test room is a converted 9-by-6-ft. store-room, with single door and no windows. Door was sealed with felt weatherstripping. Low humidity is maintained with a Frigidaire dehumidifier (foreground, left) and temperature by a 1,000-watt vane heater hung in front of small room fan. Storage shelves for test packages and a wet-dry thermometer complete the equipment needed.

adsorption isotherm will be similar to the one shown on the right in Fig. 1. If they are properly dried, their equilibrium point should be on the flat part of the isotherm. Even a large decrease in the R.H. will not cause sufficient loss of moisture to solidify the adsorbed film.

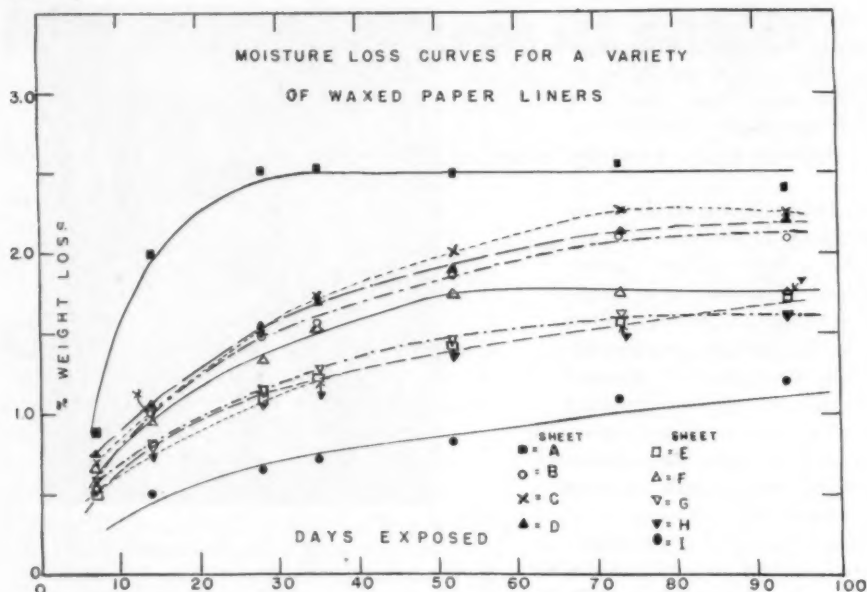
Powdered sugars are also high-purity, low-moisture sugars and have a similar isotherm to the granulated sugars.

Brown sugars, on the other hand, are high in non-sucrose components. Their isotherms are more gradual and without the sharp break. In order to have a soft texture, such sugars are normally produced with a 2 to 3% moisture content. The crystal size is relatively small, which increases the rate of equilibration, but this is more than offset by the presence of the non-sucrose material, which inhibits the rate. However, from the shape of their isotherms, it is obvious that, even at moderate humidities, the crystals are already coated with a relatively thick adsorbed layer. It is also obvious that it would not take a very large decrease in humidity to cause a large loss of moisture, resulting in the formation of a hard cake.

The packaging problem

From a packaging standpoint, it can be seen that brown sugars require the maximum protection from

FIG. 3



changes in humidity conditions. This is particularly true in a refinery, such as Godchaux, that ships most of its sugar from the high-humidity region of South Louisiana into the relatively low-humidity Midwest. These are the very conditions which will cause brown sugar to cake.

Specialty sugars, such as brown and powdered, are normally packaged in waxed-paper-lined cartons. At the Godchaux refinery, a Pneumatic Scale double carton maker is used to form the cartons and the liner is closed with a crimped drug-store fold. Since there was no intention of changing either the type of package or the packaging equipment, increasing the protection became a problem solely of improving the protection from the liner.

The carton measures 3.5 by 2 by 6 in., and is made of 0.020 white, clay-coated, solid news-back board. It is a seal-end carton, with an economy-sealed bottom and a full seal on top. The liner and

carton both are made on the same Pneumatic Scale double carton maker.

Selection of a better liner is not a very difficult problem for a well-equipped paper or packaging laboratory. This, however, was a field of investigation quite different from that normally carried out by our laboratory. It was difficult to convince management that the expense of special equipment was justified for a single project such as this. In the past, decisions to change the type of liner depended to a large extent upon the salesmanship of the paper salesman, or else they were based on price alone. The only criteria of improvement were the relative number of complaints before and after making the change. In place of this rather haphazard method, it was thought that a more definite test procedure would give at least a semi-quantitative measure of the protective quality of the liner. Such a measure could then be used to evaluate the economics of the paper.

This problem is probably not too uncommon in companies which have only a limited number of package types and this is one reason it was felt that this work might be of general interest.

Equipment and testing

Since sugar cakes as a result of drying, it was necessary to have a test room that could be held at a reasonably low humidity. To accelerate the tests, the room should also be held at about the maximum temperature to which the sugar might be exposed during shipping. This was arbitrarily set at between 95 and 100 deg. F.

Table II: Average per cent loss in weight of cartons using a variety of liners

	Days of exposure to dry room						
	7	14	28	35	52	73	94
Liner A	0.88	1.99	2.51	2.54	2.50	2.55	2.40
Liner B	0.53	1.00	1.49	1.57	1.86	2.10	2.09
Liner C	0.70	1.00	1.50	1.74	2.00	2.28	2.25
Liner D	0.75	1.05	1.54	1.70	1.90	2.12	2.20
Liner E	0.50	0.82	1.10	1.23	1.41	1.57	1.73
Liner F	0.65	0.95	1.33	1.54	1.75	1.75	1.76
Liner G	0.58	0.79	1.15	1.28	1.44	1.62	1.62
Liner H	0.57	0.73	1.07	1.23	1.35	1.57	1.75
Liner I	—	0.50	0.65	0.73	0.84	1.10	1.20

A 9-by-6-ft. storeroom (see Fig. 2) was converted to this purpose. The room selected had only a single door and no windows. The door was first carefully sealed with felt weatherstripping. Low humidity was obtained by use of a Frigidaire dehumidifier. A 1,000-watt vane heater was hung in front of a small room fan to maintain the 95 to 100 deg. A wet- and dry-bulb thermometer and storage shelves completed the room.

In spite of its simplicity and lack of automatic controls, it was found that the dry room could generally be maintained at less than 30% R.H. even during the most humid summer weather. The temperature was more sensitive to climatic changes but, even so, it was seldom necessary to adjust the heater more than once or twice a month to hold the room temperature at 100 ± 5 deg. F., which was all that was desired.

The test of a particular paper was generally carried out by making the package on the plant packaging machine, using a stub roll of the paper under test. Each package, however, was examined for proper creasing and sealing before being filled with brown sugar. Similarly, the operation of the top sealer was watched carefully and any defective packages rejected. Between 10 and 20 packages were made using each paper and the cartons were coded according to the type of paper. The packages were then weighed to 0.1 gm. and placed in the dry room in a random order. A space of at least 1 in. was left between packages to permit free circulation of air.

Table III: Average per cent loss in weight of cartons due to additional creasing of liners

	Days of exposure to dry room					
	7	14	21	28	35	42
Normal crease	0.67	0.97	1.25	1.40	1.55	1.67
50% additional crease	0.75	1.39	1.72	1.87	2.08	2.17
100% additional crease	1.10	2.08	2.37	2.43	2.51	2.50

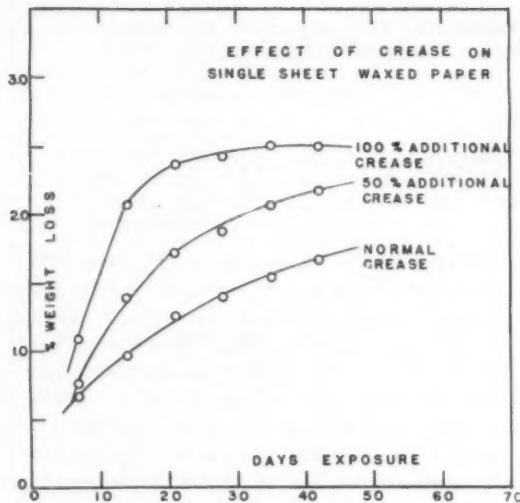
At intervals of about seven days, the packages were removed from the dry room, reweighed and the per cent loss in weight calculated. The average weight loss and mean deviation was then calculated for each set. Any cartons showing an unusually high weight loss were noted and, at the end of the test run, these were opened and liners carefully examined. If the liner was found to be defective, the data for this carton were removed from the average and the average recalculated.

The day-to-day production of brown sugar is not necessarily uniform. Therefore, only packages filled with sugar from a single batch could be compared. Similarly, the temperature and humidity conditions of the dry room varied sufficiently so that one test run could not be compared directly with another. For this reason, a number of papers were generally tested at the same time and at least one paper from a previous test was always included in each new run. This procedure also eliminated the necessity of including a blank to allow for the loss of moisture from the board of the carton. In a few runs, such

Fig. 4. Effect of exposure in test room on caking of brown sugar packed in four different liners, after 52 days. (See Table I for identity of liners.) Sugar in Liners A and F is hard caked; Liner D shows incipient cake formation; sugar in Liner E is still free flowing.



FIG. 5



blanks were included, but the weight loss was only a few per cent of the loss from the packages themselves.

For the first test run, stub rolls of eight different papers of various types were collected from a number of manufacturers. These, together with the liner that was in current use, were tested. The eight papers covered a wide variety of types, as shown in Table I. The weight losses over a period of 100 days are shown graphically in Fig. 3 and are tabulated in Table II.

All of the packages with the new papers had a

Table IV: Average per cent loss in weight of cartons with glued and heat-sealed laminated liners

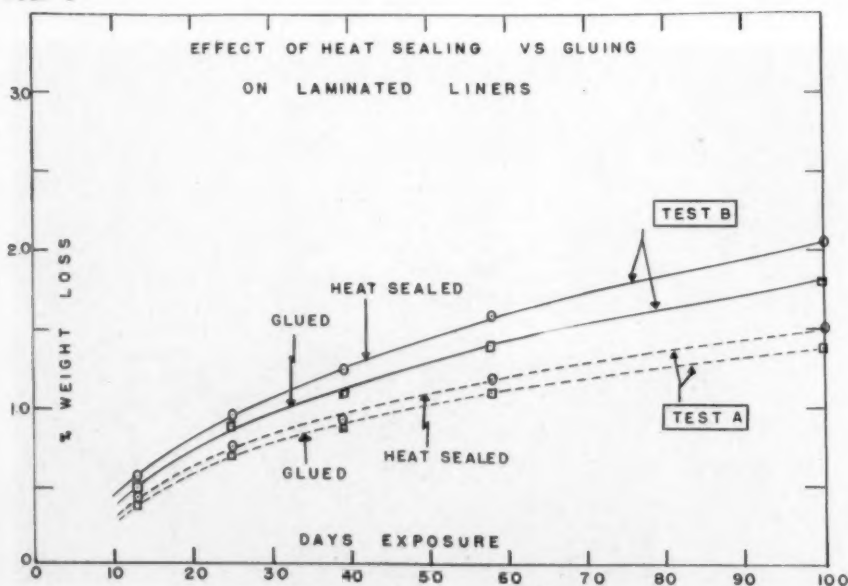
	Days of exposure to dry room				
	13	25	39	58	100
Test A					
Glued liner	0.40	0.70	0.88	1.11	1.39
Heat-sealed liner	0.42	0.76	0.93	1.19	1.50
Test B					
Glued liner	0.48	0.90	1.10	1.40	1.81
Heat-sealed liner	0.56	0.96	1.25	1.59	2.07

much slower rate of weight loss than did the packages with the old paper. The new papers also appeared to fall into three rough groups.

The smallest and slowest moisture loss was obtained by the laminated foil liner, I. This was a three-ply sheet of aluminum foil laminated between a sheet of kraft and a sheet of tissue. Unfortunately, even the excellent protection afforded by this liner could not offset its high cost, at least in our particular case, for use in a brown sugar carton.

The next best group consisted of three of the laminated sheets, while the poorest group were all single waxed sheets. This last group had an initial rapid increase in the moisture loss, followed by a tendency to level off. Examination of the sugar in some of the packages at the end of the 52 days' exposure (see Fig. 4) showed that a hard cake had formed, or started to form, in the cartons using the single sheet liners, of which A and D are typical. There was hard caking [Continued on page 238]

FIG. 6



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since we switched to our new packaging nine months ago. When we decided that we wanted to increase our supermarket sales, the Olin Film Division helped us develop these red and white printed trays for the job. Overwrapped in Olin Cellophane, these new trays attract customers, make better store displays, and give better protection against breakage. Re-orders and steadily increasing sales keep proving to us that the new Olin Cellophane overwrapped trays are a success both with the supermarkets and their customers."

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Uniform laminated structures

Q. One of our moistureproof packaging papers is a lamination of two papers with a special waxy laminating adhesive. Our tests show that the moisture transmission rates vary with the papers used, even though the weight of laminant is quite constant. Also some papers show wax staining even if highly calendered surfaces are used. We would like to obtain a more uniform and lower moistureproofness, eliminate wax staining and use the minimum amounts of laminant. Can you help us with this problem?

A. The production of waxy laminated papers with uniformly low water-vapor transmission, no wax staining and low weights of laminant depends on the control and specification of the papers, the waxy adhesive and the laminating equipment.

Standard papers will stain if coated with hot liquid waxes and also absorb excessive amounts of wax, which can cause a loss in moistureproofness unless extra laminant is used. This effect will occur even if highly calendered paper surfaces are used.

The best papers for laminations of this type are glassines, greaseproofs or parchments because they will readily coat with wax without staining and produce intact waxy coatings.

However, any standard papers from any type of pulp and with good mechanical finish can be made transiently greaseproof by surface size treatments on the paper machine. Such papers can have high strength and yet be entirely suited for wax laminating.

The next step is to develop a waxy laminant that has the necessary working characteristics to handle on the laminator and produce the degree of adhesion and moistureproofness required. Such laminants are

usually wax blends or waxes with resins and other additives to produce a compound with a wide range of adhesiveness for the combining operation, for the final use and for low moistureproofness with the least amount of laminant.

If the finished structure is to be used for frozen food, then the laminant must be formulated for low-temperature flexibility and adhesiveness. If the lamination is to undergo heat sealing, as used with a hot-filled product, then the waxy compound must be formulated for these conditions.

A wider range of both operating and end-use properties can be obtained by the use of resin or other additives, but some additives can severely reduce the moistureproofness of waxes. There are many suppliers who produce modified or blended waxes that are especially developed for paper laminating and who are aware of the problems of machine operation and end-use requirements.

The final consideration is the laminating equipment and the conditions under which the equipment operates. An ideal laminator applies the waxy laminant in a semi-liquid or plastic condition at a uniform temperature as a precisely metered and continuous coating to one of the papers. The other paper is then combined in a cold pair of rollers using on even and controllable pressure. Such laminating machines are on the market and should be purchased with temperature controllers for the wax bath and the combining rolls. Also, pressure-indicating gauges should be used.

With such a laminator, a suitable waxy laminant and papers having the proper surface, you should be able to apply from 3 to 4 lbs. of laminant per 1,000 sq. ft. and obtain uniformly good moistureproofness with no wax staining.

Package for bulb-root plants

Q. I am a packer of high-grade plants of the bulb-root type and I would like to improve the appearance of my package. In the past I have used plastic film bags with stapled-on labels and these have been sold on display racks with fair success.

I am considering window cartons with multicolor printing. The windows would show the condition of the root and the printing would show the flowers.

Could you suggest for our use another type of package that would give these results and yet be economical in a small-volume operation?

A. There are many plastic films that have nearly complete transparency and the newer grades of polyethylene film are greatly improved in this respect. Perhaps the plastic film bags you have used were too slack in fit and also were tightly sealed, which produced condensed moisture on the inside.

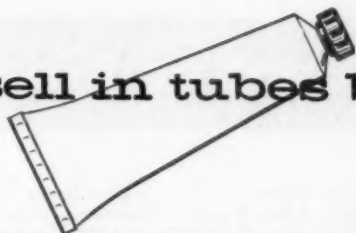
You should try a conforming wrapper with sufficient breather holes to prevent condensation.

Such a wrapper or tightly drawn bag could be pre-labeled with a heat-sealable printed label or a heavier paper label clipped on the closure as a saddle.

A printed window carton would be an attractive package, but it might require a liner or some protection from softening or staining from the moisture and soil of the root. Also a multicolor design showing each of the types of flowers would be very expensive for small-quantity purchases.

You might also consider buying unprinted window cartons and applying printed labels for product identification. Such a combination would give you lower costs, flexibility of production and a package with point-of-sale appeal.

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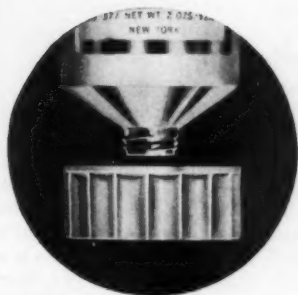


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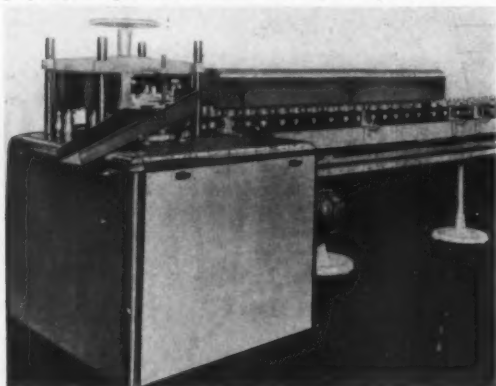
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Equipment and materials

A new filler-sealer for squeeze bottles

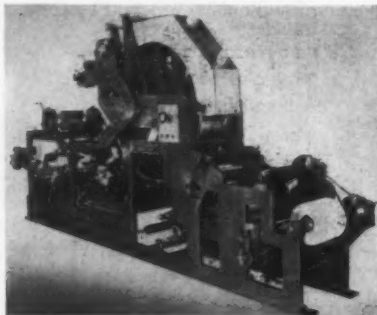
has been announced by the Horix Mfg. Co., Corliss Station, Pittsburgh 4, Pa. This new automatic filling and heat-sealing machine has aluminum holders that support the inverted polyethylene plastic containers and reportedly handle them



as easily as conventional bottles. After bottles are filled, polyethylene disks are heat sealed to the bottom and the containers are then ejected automatically onto conveyors for packing. Holders are adjustable, permitting use of one holder for several different sizes of bottles. The entire sealing unit consists of a straight electric heating element discharging to a rotary padder and ejection unit. Length of the heating element varies according to container size and operating speed. The machine handles such products as shoe polish, liquid saccharin, lotions, cosmetic creams and other similar products at speeds up to 180 c.p.m.

A three-color drum-type flexographic press

especially designed for printing pressure-sensitive tapes and other materials has been developed by the Inta-Roto



Machine Co., Inc., Richmond 23, Va. The press is for 10-in.-wide printing and has built-in flexibility which permits a wide variety of printing, perforating and slitting operations. The machine is

equipped with an unwind for pressure-sensitive tape, a pull section, a reverse printing unit, three-face printing units with intercolor driers and an over-all drier for high-speed work. It has a perforating station, slitting station and rewinds the end product on two separate mandrels equipped with differential-type tensioning spools, as well as friction-type rewinding clutch.

A new seamless capsule process

has been developed by the General Capsule Corp., Fraser, Mich. in which the "fill" material is simultaneously encased with the formation of the capsule. The process involves the use of a soluble thermoplastic or gelatin bubble. The "fill" is injected into a mass of molten thermoplastic shell material and upon immersion, the globule of "fill" material acquires a coating of shell material by means of

surface tension inherent in the fill material. The compact machine to accomplish the new process is no larger than a desk. The thermoplastic bubble process, on which the company holds exclusive patents, is said to provide a great degree of scientific control over accuracy, quality and quantity of both "fill" and shell material. The company reports that it has successfully produced the smallest capsule yet made commercially feasible, a tiny pellet containing one-half minim, or one-half drop.

An open-top consumer carton for fruit

announced by Container Corp. of America, 38 S. Dearborn St., Chicago 3, keeps fruit of different sizes bruise-free, eliminates excessive customer handling and is adapted to space-saving counter displays. Produced by the company's Seattle plant, this "Cellflex" carton automatically adjusts to fruit of varying sizes and maintains a constant gentle pressure on each piece. Desired tightness is controlled by the size and weight of the rubber band encircling the sides. Corrugated partitions, also flexible, divide the carton into cells and carry the entire vertical load within the master shipping container. They maintain a constant overall vertical height which, in combination with the fixed length and width dimensions of the bottom, enable use of one size of master shipping container. The open top and lowered sides provide maximum visibility without the use of an overwrap or window. The new package provides ample area for printing.



A new imprinter for beer cans

identified as the "Model TB Markocoder," announced by Adolph Gottsch, Inc., Hillside 5, N. J., imprints code

numbers on the bottom of beer cans at high speed. This new type of packaging line imprinting attachment is designed so that it may be moved from one location on a line to another. It reportedly requires only minor alterations to existing set-ups on the line and does not interfere with the normal flow rate of the product. Fully automatic, it operates at variable speeds up to 600 impressions per minute. In operation, the machine temporarily diverts the flow of cans through its imprinting section by means of a starwheel and returns them imprinted to the conveyor to resume their normal travel.



A new line of vacuum pouches

made from specially treated polyethylene film, said to provide extremely high resistance to the transfer of gas, air and moisture, has been introduced by the Cryovac Co., Div. of W. R. Grace & Co., Cambridge, Mass. The film reportedly provides all the advantages of a lamination with none of its disadvantages. It has high tear strength, good flexibility and a high degree of contact clarity. Designed to meet the



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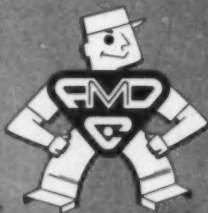
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Equipment and materials

need for airtight, moistureproof packaging, the new pouches come in a wide range of sizes suitable for consumer-sized units of sliced luncheon meats, sliced cheese, frozen meats, frankfurters, sausage, etc. The film, according to Cryovac, has a very low water-vapor transmission rate, with the following results being obtained in laboratory tests on 0.002 material for 24 hrs. with a relative humidity of 95% over a surface of 100 sq. in.: 32 deg. F., 0.02 gm.; 68 deg. F., 0.20 gm.; 100 deg. F., 0.55 gm. Vacuum-pouch processing equipment, job engineered to fit the specialized requirements of packers and retailers, is available from the firm.

A new strip-packaging machine



for packaging objects individually or in groups has been developed by The de Florez Co., Inc., 116 E. 30 St., New York 16. This new high-speed machine packages more than 800 medium-sized units per minute in cellophane or foil and handles items ranging in size from $\frac{1}{16}$ to 1 in. in diameter. The webs may be up to $\frac{5}{8}$ in. wide and rows of one to four "envelopes" may be formed simultaneously. Knives are adjustable to cut apart packaged items as required.

A feature of the machine is that both the feed outlet and feed chutes are readily adjustable in a matter of minutes for size and shape of the item being packaged. Another feature is the unit's ability to pre-form pockets in the packaging material.

A heat-seal adhesive coating

called Torriseal, announced by the Technical Service Dept., Pierce & Stevens Chemical Corp., Buffalo 3, N. Y., is said to be specially formulated for use in skin packaging and blister packaging. It is reported to bond acetate as well as vinyl sheeting to board.

Swedish tetrahedron-shape paper containers

known as "Tetra Pak" will now be available in the United States through Crown Zellerbach Corp., 343 Sansome Street,



San Francisco, which has been licensed by Akerlund & Rausing, Lund, Sweden, developer of the containers, to manufacture them in this country. Crown Zellerbach is tailoring polyethylene paper for the new package at its Western-Waxide plant in North Portland, Ore. The Tetra Pak container (see "A

New Milk Container," MODERN PACKAGING, Oct., 1951, p. 177) is formed and filled in one operation on a single machine from a single roll of paper. It is said to reduce packaging costs of a single serving up to 50%. Used primarily for liquid products, the containers may be filled with milk, cream, fruit juices and soft drinks. Smaller sizes package ice cream and individual portions of honey, jam, jelly, salad dressings, etc.

A new motorized unit for cutting corrugated

board of 600-lb. test and heavier in one pass of the cutting wheel has been announced by Sto-Pa-Co Products, 1461 W. Fullerton Ave., Chicago. Designed specially for use on the

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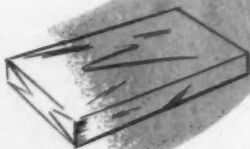
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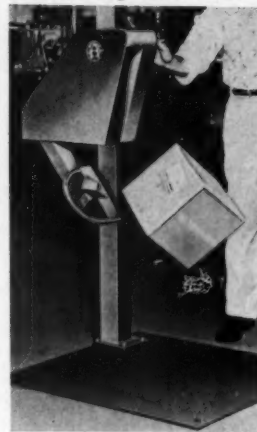
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Equipment and materials

packaging line in connection with the "fan-fold" corrugated method of packaging long lengths of extruded metal bars and rods, this motorized model of the company's Fibrecutter is reported to be 15 times faster than previous methods of cutting the board and far less fatiguing.

A new drop tester for containers



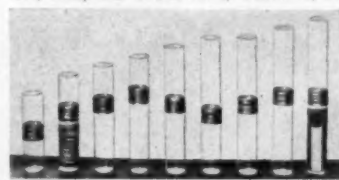
that releases packages at any angle without rotation has been announced by the L. A. B. Corp., 1010 Onondaga St., Skaneateles, N. Y. The package can be dropped in the exact position desired—on the flat side, edge or corner—without rotating or turning during its fall. The unit will handle long or odd-shaped packages which normally were difficult or impossible to test in previous drop installations, according to the supplier. A single spring-actuated arm supports the package and a universal supporting bracket can be adjusted instantly for any desired package position. The tester can be set quickly for drops from any height between 12 and 60 in. and will handle packages up to 100 lbs. Space requirements are 3 by 4 ft. of floor area and 8-ft. height clearance.

A new line of inks for printing Mylar

polyester film, made by DuPont, has been announced by the Claremont Pigment Dispersion Corp., 39 Powerhouse Rd., Roslyn Heights, Long Island, N. Y. These "My" series inks can be supplied from stock for gravure, flexography, silk screening, stamping and striping. Formulations for special applications are available to order.

A new line of plastic vials

with threaded cap and body sections and joined by an aluminum coupling has been announced by Lerner Plastics, Inc., 502 South Ave., Garwood, N. J. This flexibility



of design facilitates packaging of long or difficult-to-package products. Also, by inserting a simple separator in the center of the aluminum coupling, these new Lerner Plastic Coupl-Vials can be used to package two different or related products. The two threaded sections can be supplied in various combinations of sizes to suit all packaging requirements. Ten different combinations and sizes available from stock range from 1 by 4 in. (2-in. cap with 2-in. body) up to 1 by 8 in. (4-in. cap with 4-in. body). Seven combinations and sizes available on special order range from 3/4 by 4 in. (2-in. cap with 2-in. body) to 1/2 by 7 in. (3 1/2-in. cap with 3 1/2-in. body). The vials, in clear or opaque colors, can be printed.

New oil-barrier parchment papers

for industrial use have been announced by the Paterson Parchment Paper Co., Bristol, Pa. One material in the series, known as Patapar Vegetable Parchment 27-41T, is reported to offer extreme resistance to the penetration

PLATEN PRESS QUALITY CARTONS...at better than cylinder press speeds!



now...

ALL THREE IN THIS ONE NEW ROLL-FED CHAMPLAIN CUTTER-CREASER

HEAVY DUTY ... 500,000-lb. cutting load capacity
ACCURATE ... with Micro-Tension Control
VERSATILE ... adapts easily to almost any production requirement

Exceptional new efficiency is built into Champlain's new Cutter-Creaser for folding cartons. Cutting, creasing and automatic stripping are accomplished in only one pass...with an amazing number of impressions per minute! Although this machine is ideally used inline with Champlain printing units, it can be used

economically to die-cut a plain or pre-printed web. Now better than ever, with unique new refinements, this heavy-duty equipment offers the best possible means for manufacturing high-quality, low-cost cartons. You'll see why when you look over *all* its features.

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- Increased cutting load capacity (250 tons) with a high safety factor.
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- *Micro-Tension Control* for constant tension of web into cutter-creaser from press or roll stand... in conjunction with patented intermittent feed drive delivers exceptional print-to-cut-register accuracy. Immediate visual indication of variables... tension correction can be made manually or automatically (electric eye control).

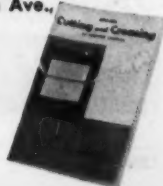
VERSATILE

- Variable speed... slow belt delivery controls carton shingling, permits easy inspection.
- Automatic counting and delivery mechanism... can be pre-set for any number of blanks... groups and sorts cartons in any desired quantity.
- Adjustable chase tie bar... locates in various positions... gives positive die lock-up... keeps chase square.
- New-type chase permits make-ready *in back of cutting or score rule*, as well as under cutting plate.
- Running register control... position of stripping can be brought into register with waste areas while press is running.
- Minimum spacing ($\frac{1}{4}$ ") of waste extractor pins available for stripping the most intricate jobs.

WRITE TODAY for your copy of the comprehensive new book giving more facts about Champlain Cutter-Creasers. **CHAMPLAIN COMPANY, INC., 88 Llewellyn Ave., Bloomfield, N. J. Chicago Office: 520 N. Michigan Ave., Chicago 11, Ill.**



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These two new JET-PAK insulated bag lines are moisture-resistant, lightweight, reusable, durable, economical—they provide products with positive protection against rough handling and damage.

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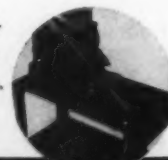
- ✓ AUTOMATIC...Forms and fills heat seal packets.
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Semi-automatic packaging on THE VIBROCOUNT. Pressure on discharge tunnel releases pre-counted items into any container.

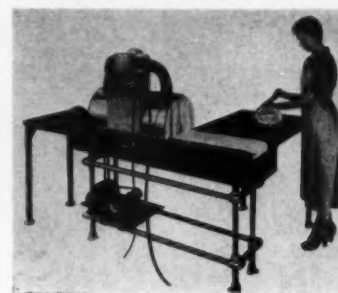


Equipment and materials

or crawl of all known oils, including silicone, even under pressure. It is easy to glue by nearly all adhesives and can be readily printed, according to the company, and is recommended as a caulking tube liner, an insert for multiwall bags and a liner for fibre tubes and cans.

A new heat-shrinking unit

for use with wrappers of heat-shrinkable film has been announced by the Great Lakes Stamp & Mfg. Co., 2500 Irving Park Rd., Chicago 18. Designed for use either as



a self-contained installation or to be coupled into existing packaging lines, the basic unit is a conveyor over which is installed a heat-shrinking tunnel through which wrapped items are carried automatically. Speed of the conveyor is adjustable, with a broad

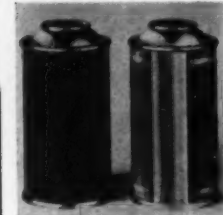
range. Because shrinking action is so rapid and packages pass through the tunnel quickly, the company reports, temperature of package contents is not unduly changed. The shrink-tunnel unit is furnished with a 5-ft. or longer variable-speed conveyor section. Stainless steel wrapping tables have in-set heat-sealing plates for wrapper sealing. Length of the conveyor may be increased to accommodate any number of wrapping stations.

A short-run color printing process

called Spectradyne has been announced by the Process Designs Co., 131 E. 21 St., Brooklyn 26. It is designed for printing from one to 25 or more copies. The process, using black and white artwork, line, wash, photos or combinations, prints in any color or combinations of colors in perfect register, on paper, gold or silver foil, acetate, metal, cellophane, etc. No plates are required. The process is suggested as useful in the packaging and label field.

Aerosol containers with striped side seams

now available from Continental Can Co., 100 E. 42 St., New York 17, enable the side seam to match the back-



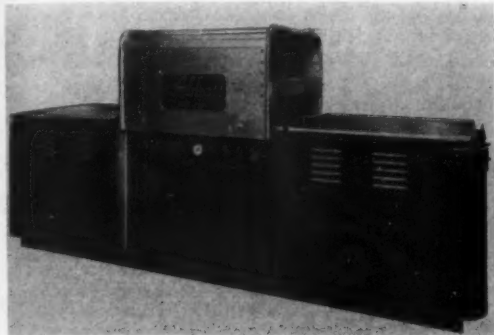
ground color on the can body. Employing a spray method of side-seam coloring, this development is being offered on the company's 6-oz. dome-top-style aerosol cans (202 x 314 size). No base coat is needed over the plain side-seam metal and no varnish coat is applied over the spray. The accompanying illustration contrasts the striped side-seam (left) with the plain tin solder margin at the right.

Low-pressure extruded polyethylene sheet

which may be vacuum formed has been announced by the Campeco Division, Chicago Molded Products Corp., 2717 N. Normandy Ave., Chicago 35. The new linear polyethylene sheet is reported to have excellent resistance to heat distortion, greatly improved rigidity and impact resistance, even in thin gauges. Highly inert, it will withstand chemical attack, including some acids that attack even glass, according to the supplier. The company predicts that the new sheet will find use in containers, specially formed

packages, trays and carboys. The heavy-duty sheet can be vacuum formed into complex shapes and deep draws, according to the company. However, some slight modification in present heating equipment may be necessary because of the material's different heating and cooling cycles and a tendency toward plastic "memory."

An improved skin-packaging machine announced by Abbott Plastic Machine Corp., 7124 N. Clark St., Chicago, features a new timing system under which each phase of the operating cycle—including heat-



ing, drape, vacuum, oven dwell and vacuum hold—is governed by its own separate timer. The machine is a two-station model, with each station capable of independent operation. It will accommodate a master card measuring 38 by 33½ in. in size.

Corrugated is cut automatically

with a new model of the "Wrap-O-Matic" machine made by the Rosenthal Mfg. Co., 5030 Kedzie Ave., Chicago 24, Ill. Four different sizes of sheet can be cut with the use of push-button controls which can be set to feed and cut the corrugated automatically as a continuous operation. Three different sizes of rolls or corrugated can be handled simultaneously if they do not exceed a total width of 48 in. A scoring attachment is also available.

A new scale for bagging smaller units



weighing 25, 50 and 100 lbs. at rates up to 15 bags a minute has been announced by Richardson Scale Co., Van Houten Ave., Clifton, N. J. Called the Model GA-3B, the new high-speed scale is designed to handle all dry feeds, including grains, crumbles, pellets, range cubes and molasses feed. Special dustproof construction makes it particularly suitable for handling dusty materials, the company reports. Weighing accuracy tolerances are from ± 0 to 3 oz. on most materials, according to the manufacturer. The machine can be supplied

as a duplex model, providing greater output and equal weighing accuracy.

Custom polyvinyl acetate emulsions

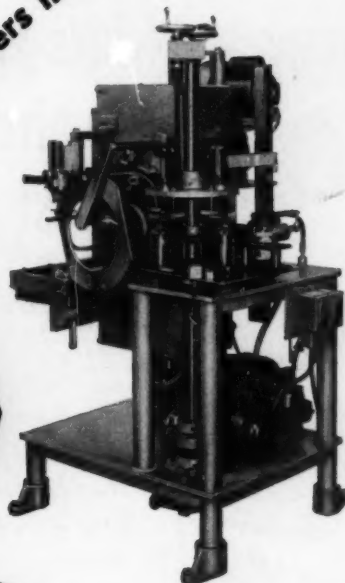
for coatings, sizings and impregnations are being offered by Paisley Products, Inc., Div. of Morningstar, Nicol, Inc., 630 W. 51 St., New York 19. Increased plant capacity, special processing and new techniques have enabled the company to offer these Vinymuls PVA emulsions in amounts from 5 gal. to carload lots to meet customers' needs.

A new automatic code dater

known as "Liftype" has been announced by Acro Tool & Die Works, 4554 N. Broadway, Chicago 40. This new device is said to make type changing and code changing simple

Labels containers in upright position!

Less than 5 minutes to change over to any size or shape container or label.

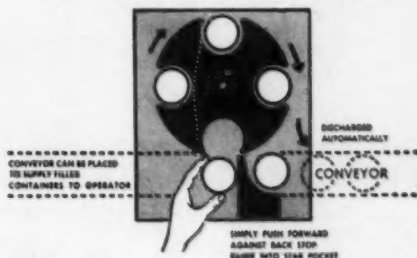


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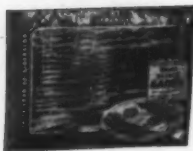
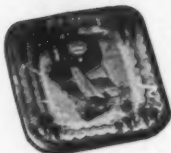
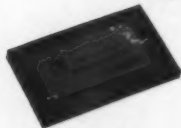
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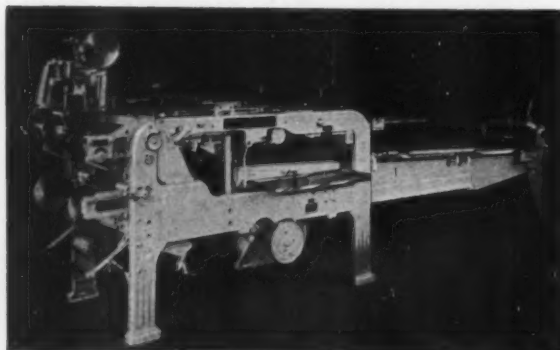
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Paper specialties, textiles, baked goods, meats, and products only remotely similar . . . the Oliver wraps them securely, neatly, rapidly. Using modern packaging materials it heat- or glue-seals your package for utmost protection. A smart diecut label can be heat-sealed to the package. The quick-adjustability of the Oliver keeps the unit cost low. Each of 7 models handles packages in a wide range of sizes at speeds up to 50 a minute. Printed wrappers are registered by an electric eye. The many Oliver features—plus the Roll-Type Labeling System—save you dollars every day. Write now for complete details.



"Oliver" Wrapping Machine

with Automatic Roll-Type Labeling System

OLIVER MACHINERY COMPANY · GRAND RAPIDS 2, MICH.

Equipment and materials

and fast. The unit has type permanently mounted on rotating-type bands which are combined into a compact, removable unit that can be instantly snapped in and out. Each band on this Model 6000 has 13 letters and a blank space, or 10 numerals and blank spaces. The unit can be supplied with from four to eight type bands.

A new label activator unit



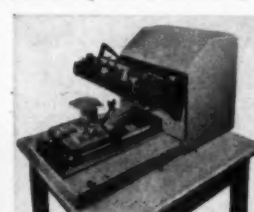
introduced by the Toledo Scale Co., Toledo 1, Ohio, is a compact machine designed for instant activation of a label and permanently affixing it to the package without excessive heat to the contents of the package.

The operator places a label on the activator, vacuum holds it securely to the Teflon-coated heat grid for accurate position when the operator momentarily places the package against the activated label. A swivel head and an adjustable height post make this new Model 250 adaptable to convenient working position.

Dimensions of the new machine are 7 $\frac{1}{2}$ in. wide, 7 $\frac{1}{2}$ in. base depth, 10 $\frac{1}{2}$ in. over-all depth. Range of height adjustability is 14 $\frac{1}{2}$ to 20 $\frac{1}{2}$ in.

A new screen process printing machine

that imprints up to 20 objects per minute has been announced by the Markem Machine Co., Keene 57, N. H. This air-operated, electrically controlled silk-screen printing



machine will imprint either flat articles or cylindrical shapes such as polyethylene bottles, lipstick cases and plastic cases. Maximum imprint of the new Markem Model 90S is 5 $\frac{1}{2}$ by 7 $\frac{1}{2}$ in. Cylindrical objects from 1 $\frac{1}{2}$ to 4 in. in diameter can be handled, with a maximum imprint of 5 $\frac{1}{2}$ in.

around the circumference and an axial dimension of 7 $\frac{1}{2}$ in. Marking compounds in various colors, specially formulated for use on the machine, are available from the manufacturer, who can also supply screens when furnished with the customer's artwork.

Snap-on screw tops for aerosol cans

announced by the Builder's Sheet Metal Works, Inc., 108-110 Wooster St., New York 12, are particularly recommended for manufacturers who require a refillable aerosol container for their products. These new closures can be re-used over and over again, according to the supplier, and eliminate the need for expensive capping machinery. They are also recommended for use by laboratories and individuals to test formulas and new products, and for "do-it-yourself" products.

A new all-purpose flexographic ink

called Ultraflex, announced by the Crescent Ink & Color Co., 464 N. Fifth St., Philadelphia 23, Pa., may be used on all types of cellophane, including saran coated, with or without lacquer; on paper, acetate, treated polyethylene, foils, Pliofilm and Mylar, according to the supplier, thus simplifying ink inventories. An additive is used when apply-

Your customers prefer **Tri-Sure® Utility Can Closures**

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can be rested on filling opening.
Two lengths: 2" and 2 3/4"

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Large opening makes it easy to clean out and re-fill the can for many uses.



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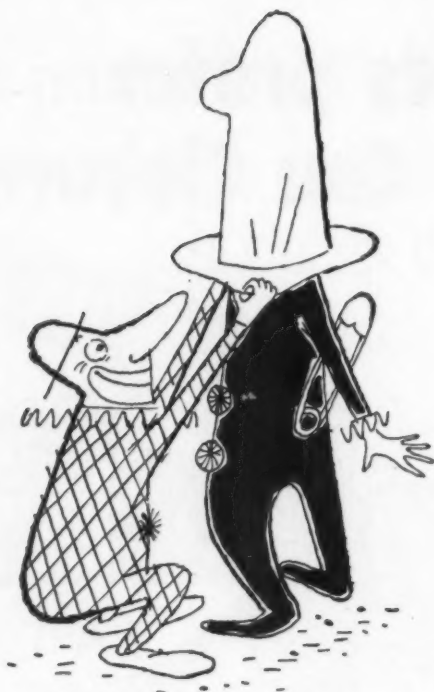
Tri-Sure Products Limited, St. Catharines, Ontario, Canada

Tri-Sure S/A Indústria e Comércio, São Paulo, Brazil

American Flange & Manufacturing Co. Inc., Miowera Road, Villawood, N.S.W., Australia

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the special type of PVC foil with excellent deepdrawing qualities for vacuum-forming, blow-forming, and plug-forming.



the rigid PVC foil with an exceptional tensile strength, practically moisture-proof, unaffected by temperatures up to 176° F and with good transparency.



the rigid PVC foil is available colorless and in colored finishes, opaque or transparent and in all widths up to 32".



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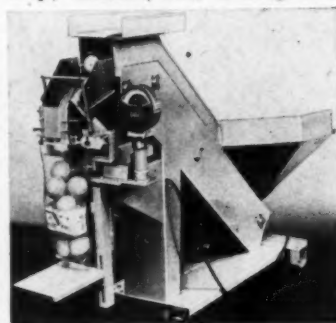
David S. Greenfield, 3143 Decatur Avenue, New York 67, N.Y.

Equipment and materials

ing Ultraflex to Pliofilm and Mylar. It is reported to have passed very rigid tests for blocking, non-bleeding, heat resistance, etc.

An automatic bagger for produce

introduced by Florida Div., Food Machinery & Chemical Corp., Lakeland, Fla., is designed to provide accurate



bagging for pre-packaged fruits and vegetables. The unit is light in weight and portable, and is mounted on full-swivel casters and skids. It consists of a bulk hopper, elevator, scale and weighing hoppers, with a feature being a special waterproof plastic-covered conveyor

belt which forms pockets on its upward travel for carrying the produce, then flattens out as it passes over a top roll, discharging the items. A universal hopper reportedly can handle all types of produce, filling paper, polyethylene or mesh bags. Action of the bagger is continuous, with the conveyor being controlled by microswitches.

A new size of metal crown

announced by the Bond Crown & Cork Div. of Continental Can Co., 100 E. 42 St., New York 17, is reported to be the first size change in the 60-yr. history of the industry. The new crown (right in the accompanying illustration)



has a shorter metal skirt combined with a plastic liner. The new Triple-Seal Custom Crown, because of its savings in side metal, offers greater economy to bottlers of beer and carbonated beverages. Protection is reported equal to that of the standard-sized precision-molded, plastic-lined crown. Plastic liner is the same thickness as in the standard-sized crown. Users of the new crown require only slight modifications in crowners and chutes at bottler plants, reported to involve only a nominal expenditure.

High-gloss waxed-paper overwraps



for frozen foods, known as Super Glo-seal, have been announced by Western-Waxide Specialty Packaging Div., Crown Zellerbach Corp., San Leandro, Calif. The new wraps are reported to have improved strength and tear resistance, and can be used on all stand-

ard high-speed wrapping equipment. They can be printed in multiple colors and are also available with full-color stock designs for pies, vegetables, seafood, fruits, meats and other special items.

Wood veneer panel stock

overlaid with kraft linerboard is now being produced by the Special Products Div., Weyerhaeuser Timber Co., Tacoma, Wash., in several new constructions for industrial packaging. Additions to the Ply-Veneer line include a new Type II panel stock in 1/2-in. or 3/4-in. core thicknesses with 42-lbs. of kraft facings both sides. These are faced

Trojan

FOIL

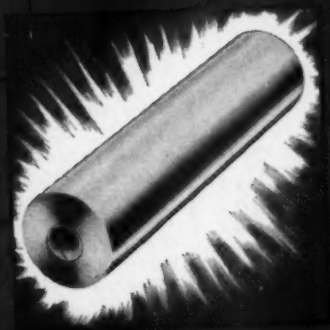
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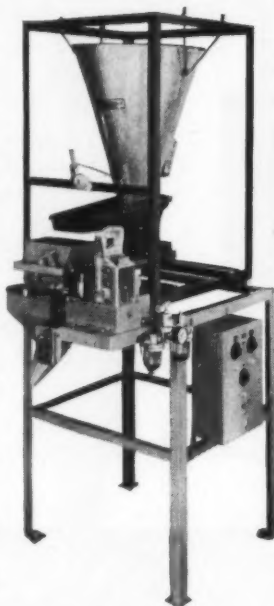
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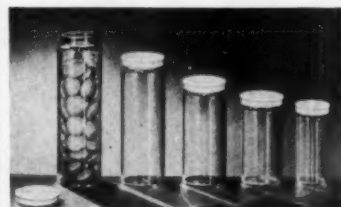
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Equipment and materials

with high wet-strength brown kraft linerboard and are said to conform to current Federal specifications for overseas packaging. Another new construction is a white-one-side material, with a surface of white bleached kraft linerboard laminated to the standard brown unbleached kraft facing, for display use.

A new line of prescriptionware vials

known as Kimble Opticlear Snap-Cap Vials are reported to combine professional appearance with maximum convenience.



The glass vials feature polyethylene Snap-Caps which can be easily opened and closed with a flick of the thumb. The cap fits on the outside of the vial, providing more room for

contents. Specially tooled neck and lip are said to assure positive protection of contents. The new line is a product of Kimble Glass Co., subsidiary of Owens-Illinois, and are distributed by the Prescription Ware Div., Owens-Illinois Glass Co., Toledo 1, Ohio.

Plastic lids to be automatically applied

to plastic containers have been announced by the Mutual Plastic Mold Co., 5141 Firestone Pl., South Gate, Calif. Made of high-impact polystyrene, they enable speedy, efficient and economical mechanical capping of plastic containers, according to the supplier.

Larger sizes of cellulose bands

are now available from E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Del. The company's "Cel-O-Seal" bands are now produced in diameters up to and including 102 millimeters (approximately 4.02). Former maximum size was 92 millimeters.

Aluminum containers with 'pop out' tops

for packaging foods, announced by Foil Kraft Div., Kaiser Aluminum & Chemical Corp., 1924 Broadway, Oakland 12,



Calif., reportedly can be readily opened with a flick of the finger and resealed tightly by snapping the top back in place. The new closing technique is due to a double-rolled edge, which requires no crimping to hold the top securely in place. The edge is also said to be stronger, neater and safer than a crimped edge.

Kaiser is making the new containers available in a variety of sizes and shapes.

A new polyethylene resin

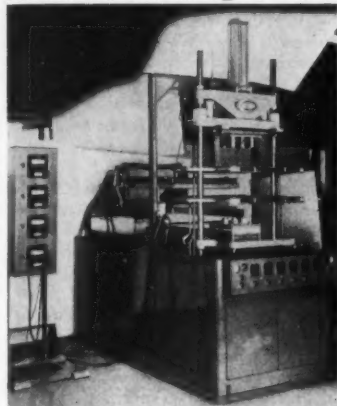
designated DND-0400, announced by Bakelite Co., a Div. of Union Carbide & Carbon Corp., 260 Madison Ave., New York 16, is reported to give noticeably greater rigidity to large molded parts. This higher-density polyethylene also is said to give parts improved gloss, harder surface, non-skinning properties and improved heat resistance.

New 25- and 50-lb. mesh window unit for bags

designed to be used in tandem with existing tubing or bag machines has been developed by H. G. Weber & Co., Inc., Kiel, Wis. Instead of die cutting the window opening

in all three plies of paper simultaneously, the outer ply is cut independently at one station and the inner two plies at another station. Window opening in outer ply has smaller dimensions than that of the inner two plies, thus making registering of the die-cut openings far less exacting. This new feature also saves time in making changes and is said to result in a neater, more uniform window.

Both vacuum forming and trimming



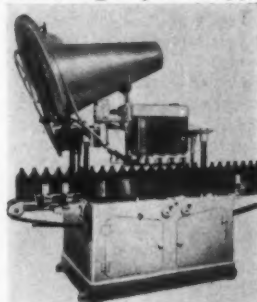
are performed in one operation by the new Vac-Trim Model 246 machine introduced by the Vacuum Forming Corp., 76 S. Bayless Ave., Port Washington, N. Y. It performs straight vacuum forming using female molds, drape forming using male molds and plug forming using plugs and female molds. The formed parts are trimmed by the

use of temperature-controlled, heated trimming dies. Depth of draw is 9 in. Maximum mold area is 24 by 24 in. The company is also building a Model 486, completely hydraulic in operation, which will handle mold sizes up to 24 by 48 in.

A new calendered, unplasticized P.V.C.

that is clear has been announced by David S. Greenfield, 1489 Plimpton Ave., New York 52, representative in the United States for Anorgana G.M.B.H., Munchen, West Germany. This new Genotherm material is said to be "glass clear," whereas the former transparent grade was "smokey," and reportedly places it in a position on the clarity basis with cellulose acetate and regenerated cellulose for packaging purposes and with polyester films as a thin film for metalizing. It is available in oriented ("C"), unoriented ("UG") and in "HS" with one surface prepared for low-temperature heat sealing or laminating. Presently stocked are thicknesses from 0.0012 to 0.008 in. and widths up to 32 in.

A new high-speed capping machine



announced by Resina Automatic Machinery Co., Inc., 572 Smith St., Brooklyn 31, will be on display at the Packaging Machinery & Materials Exposition to be held in Cleveland next month. Developed especially for users requiring heavy-duty equipment and maximum capping speeds, the new Model RU-200 high-speed capper is described as a "big brother" to the Model RU-120. It has a rated

speed of 200 per minute, which the company says can be doubled in many instances. The capper has two motors of ½ h.p. each. Conveyor length is 8 ft. 1½ in.

Improved covers for 3-lb. shortening cans

which reportedly give a more positive reclosure than old-style covers have been announced by Continental Can Co., 100 E. 42 St., New York 17. The new lids will not pop up after reclosure, it is said, for their "lugs" have been elongated and changed slightly in contour to permit a better seal. This has the effect of providing a greater reclosure surface that retains its form and maintains pressure against the can collar throughout many openings and reclosings.

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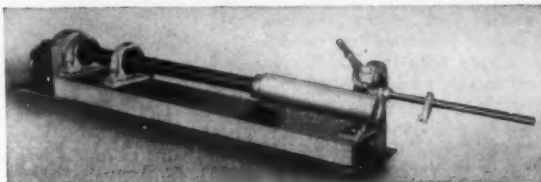
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CONVERTING EQUIPMENT

Plants and people

Bradley Dewey, president and founder of Bradley Container Corp., Maynard, Mass., has retired from administrative duties with that company. He has been appointed a consultant to top management and a special representative for Olin Mathieson Chemical Corp. in the field of plastic containers and the Bradley firm will be operated as a division of Olin Mathieson.

Food Machinery & Chemical Corp., San Jose, Calif., at its annual organization meeting elected Paul L. Davies,



Davies

Hart

former president, as chairman and chief executive officer. Ernest Hart, former executive vice president in charge of chemical divisions, has been elected president. John D. Crummeys, who has served as board chairman since his retirement from active management, was elected honorary chairman. The following executive promotions were made: Dr. Carl F. Prutton, executive vice president in charge of chemical divisions; James M. Hait, executive vice president; John D. Fennebresque, executive vice president; Jack M. Pope, financial vice president; Alfred T. Loeffler, vice president. All other corporate officers were re-elected except Dr. Max E. Bretschger, who has retired.

Robert F. Elder has been elected president of Plax Corp., Hartford, Conn., makers of plastic containers, sheet and film. Three members of the Plax research, development and engineering department have been promoted. Grant S. Brown has been named manager of research. New assistant research managers are Robert G. Strauss, who will be responsible for blownware engineering; Richard J. Morcom, who will be in charge of extrusion engineering.

Allyn C. Beardsell, has been elected president and treasurer of Container Laboratories, Inc., Chicago



Beardsell

Wharton

packaging consultant firm. Mr. Beardsell will fill the vacancy created by the resignation of Charles J. Zusi. Thomas P. Wharton has been elected vice president of the firm. He will continue to manage its Washington Division, where he is re-

sponsible for package engineering studies being performed for the Government and for Government prime contractors. Mr. Wharton has been a frequent contributor of articles to the Technical Section of MODERN PACKAGING.

Interchemical Corp., New York, has acquired the industrial adhesives business of Angier Products, Inc., Cambridge, Mass. Angier will operate as the Angier Adhesives Division of Interchemical with its present management and staff. Henry S. Bothfield, president of Angier, will become division president of the new Interchemical unit.

An expansion program that will virtually double DuPont's capacity for manufacturing its "Alathon" polyethylene resin has been announced by the company's Polychemicals Dept. Plans include modernizing existing facilities and construction of a new manufacturing unit at DuPont's Sabine River Works, Orange, Tex. The program calls for periodic increases in production, starting late in the summer and culminating in the completion of the new unit early in 1958. A substantial part of the new production will be in the company's two new resins of higher density.



Reiter

Fred M. Reiter, formerly with Standard Packaging Corp.'s Flex-Vac Div., has joined the sales development and technical service laboratory of DuPont's Film Dept.

The Paper Package Co., Indianapolis, Ind., celebrated its 60th anniversary recently with an open house for employees and their families. Plant tours and a reception in the company cafeteria featured the event. When the company was founded in 1896, it was known as the Beehive Paper Box Co. The corporate name was changed in 1919. As an indication of the shift in packaging demands, the company states that a quarter-century ago, 60% of its output was set-up boxes; today, 70% of the company's output is folding boxes. Head of the firm is Don B. Fobes. M. L. McManus is vice president in charge of sales; E. H. Grebe, treasurer; R. M. Maury, secretary, and R. G. Sutphin, superintendent.

Crown Zellerbach Corp., San Francisco, has combined its Western Waxed Paper and Waxide Paper Co. divisions into a newly integrated division under the name Western-Waxide Specialty Packaging. The integration, which combines their converting plants, management, sales and service facilities, and

design and research staffs, is designed to make Western-Waxide a national organization for specialty packaging materials. Headquarters are in San Leandro, with J. E. Crosby as general manager and David J. Benjamin as assistant general manager.

William M. Burr, who has been sales manager for the Northwestern Division of Crown Zellerbach's Gaylord Container Corp. Div., is being transferred from Milwaukee to Vancouver, British Columbia, Canada, as sales manager of Canadian Boxes Div. of Crown Zellerbach Canada, Ltd. Succeeding Mr. Burr in Milwaukee is James A. Talboys. Ted M. Wilkie has been appointed manager of the newly created Eastern Division, with headquarters in New York City. Frank R. Boswell, who has been assistant sales manager in New York, will assume management of this sales office.

The formation of a new company, Cochran Continental Container Corp., has been announced jointly by Continental Can Co., Inc., New York, and Cochran Foil Co., Louisville, Ky. The new company, equally owned by Cochran and Continental, will be located in Louisville, where the facilities and organization of the Cochran Products Division will be available. The new firm will manufacture rigid foil packages used by the frozen food, bakery, dairy and other industries.

Merger of Continental Can Co. and Robert Cair Co., Inc., has been approved by the two companies. The proposal is subject to approval by stockholders of both firms. Continental has gradually diversified its activities over the last several years, but has not produced shipping containers and cartons, a field in which Cair has been a leader for more than 90 years.

A new metal can plant is being built by Continental Can in Maspeth, Queens, for manufacturing beer cans. Production at the plant, Continental's first in New York City, is expected to commence next spring.

The acquisition of Canadian Crown Cork Co., Ltd., Montreal, by Continental Can has been announced.

A group of industrialists has purchased stock control of the Fulton Bag & Cotton Mills, Atlanta, Ga. The company's new board of directors includes Julius W. Abernethy, David Berdon, I. T. Cohen, Thomas L. Kaplin, Joseph Karp, Jay Levine, Bernard A. Mitchell, Moses Richter, A. A. Shuford, Jr., and Herbert L. Werner. The majority of officers of the old company were re-elected to their former positions. Mr. Abernethy was elected chairman of the board and Robert O. Arnold, president. Mr. Richter was named vice chairman of

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Plants and people

the board and treasurer. Mr. Mitchell was named secretary and chairman of the executive committee. Re-elected to their former positions were Jason M. Elsas, vice president and general manager, Bag Division; Norman E. Elsas, vice president and general manager, Mill Division; Clarence E. Elsas, vice president and general manager, Fabrica Division. E. A. Cronheim was elected assistant secretary and George L. Brogdon, assistant treasurer. F. G. Barnett and E. Monroe Hornsby were re-elected vice presidents. The executive committee, headed by Mr. Mitchell, is composed of Messrs. Shuford, Werner, Richter, Karp and Levine.



Davidson

The Gardner Board & Carton Co., Middletown, Ohio, has appointed David Davidson to the new position of supervisor of coating development in the firm's technical department. Mr. Davidson will be responsible for development of present paperboard coatings and research on new processes.

Cellu-Craft Products Corp., New Hyde Park, N. Y., converter of flexible packaging materials, has acquired the New York City firm of Gustave Rubner, Inc., makers of decorative papers and fabrics, gift wraps and other specialty materials.

Allan H. Stone has been appointed production manager for Cellu-Craft.

Walter F. Perkins has retired as vice president and general manager of the Metal Products Division of Koppers Co., Inc., Pittsburgh. E. R. Hall, formerly vice president and assistant general manager of the division, has been elected to succeed Mr. Perkins and H. B. Cummings has been named vice president and assistant general manager of the division.

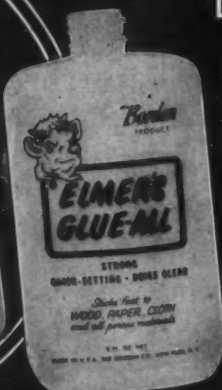
Ted Suess has been appointed Eastern sales manager, bakery packaging, Marathon Corp., Menasha, Wis.

A change in company name from Manchester Paper Boxes, Ltd., Toronto, Canada, to Marathon Packages, Ltd., has been announced. The Canadian firm was purchased last year by Marathon and operates as a division of the parent company.

In the Glass Container Division of Owens-Illinois Glass Co., Toledo, Ohio. Raymond G. Reynolds has been reassigned from the Dallas, Tex., branch to the New York branch. Henry T. Beall moves to Dallas from Memphis, Tenn. C. David Ebersole, Jr., has been transferred from Toledo to Memphis.

A Connecticut sales office in Hartford has been established for Owens-Illinois'

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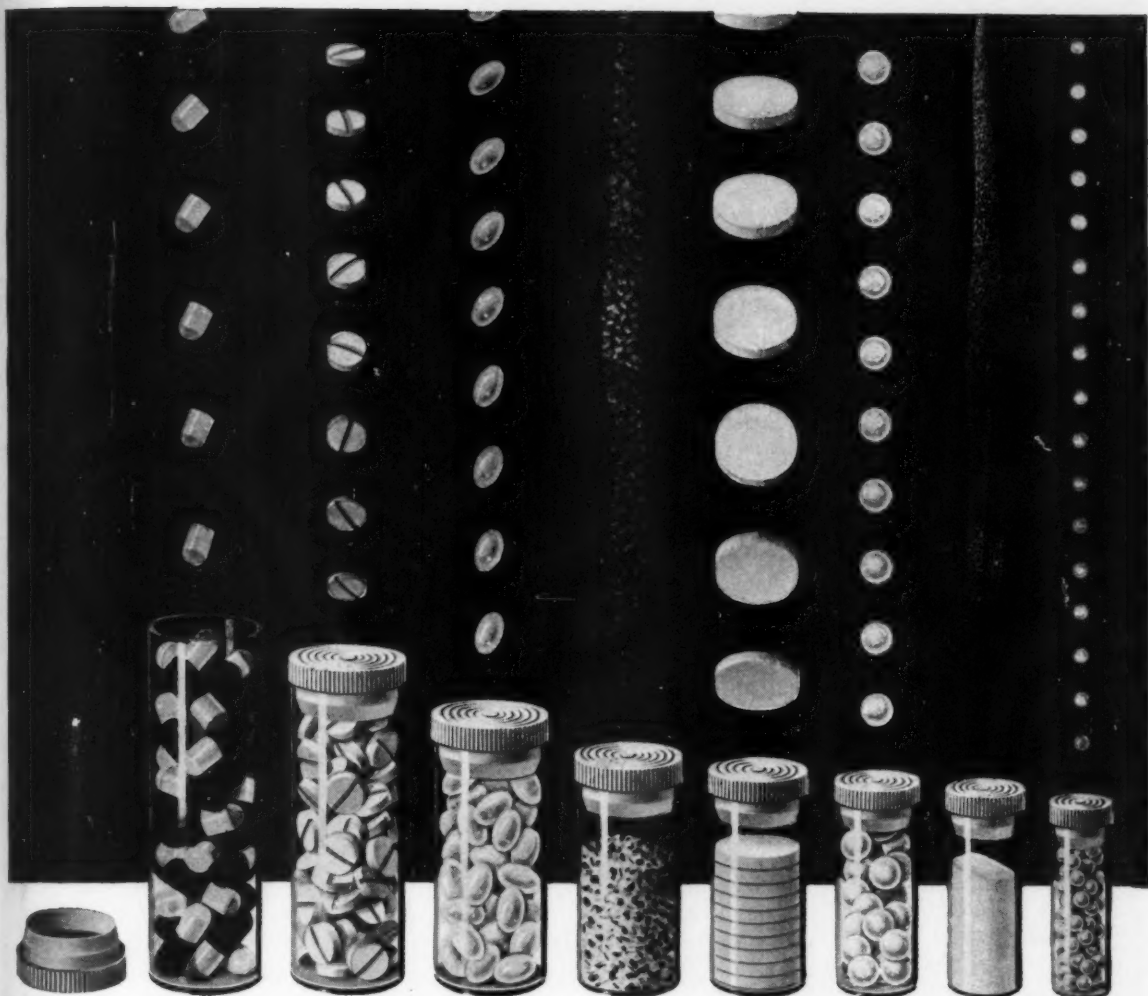
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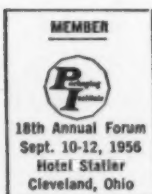
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Plants and people

Glass Container Division. John H. Kessler is senior salesman, assisted by James D. Irwin. The new office is located at 945 Asylum Ave.

Thomas M. Huber has been appointed manager of the new O-I glass container plant at San Jose de la Lajas, near Havana, Cuba.

A. G. Hewitt has been appointed vice president in charge of research and development for The Visking Corp., Chicago. Mr. Hewitt, formerly general manager of the company's Food Casing Division and a vice president, will have charge of all research, engineering, industrial engineering and market research. Mr.

Hewitt

Hewitt's former position is being taken over by L. E. Houck, presently general manager of Visking's Canadian subsidiary.

A new polymerization plant with an initial annual production of 10 million pounds of polyvinyl acetate has been opened at Demopolis, Ala., by the Polycy-Monomer Dept. of the Borden Co.'s Chemical Div. Robert Stickney is superintendent of the new plant.

Claude A. Putnam has been elected to the newly established position of chairman of the board of the Markem Machine Co., Keene, N. H. Succeeding him as president of the firm is David F. Putnam, who had been vice president.

Reynolds Guyer, who has been associated with the Waldorf Paper Products Co. as vice president and director of research, has established his own agency, the Reynolds Guyer Agency of Indus-



Reynolds Guyer (left) and E. J. Mergenthaler

trial Design, Griggs-Midway Bldg., St. Paul, Minn. The firm will specialize in the development of packages, packaging machinery and point-of-purchase display materials. Associated with Mr. Guyer, who has had more than 100 patents issued in his name, is Edward J. Mergenthaler, merchandising expert and assistant director of the new agency.

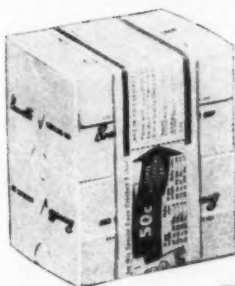
Texas Eastman Co., division of Eastman Kodak Co., will broaden its activity in the field of high-density, low-pressure polyethylene plastics. Plans call for the construction of a semi-commercial manufacturing unit at the Longview, Tex., plant. It will be used for experimental production and may result in eventual [Continued on page 210]

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**SPECIALLY DESIGNED
TO FEATURE COMBINATION
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AND DISPLAY APPEAL**

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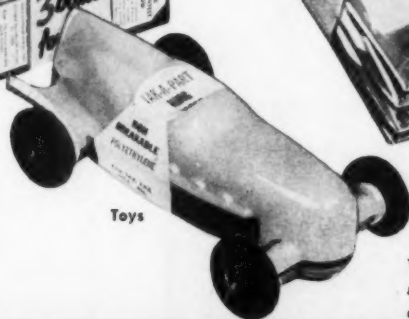
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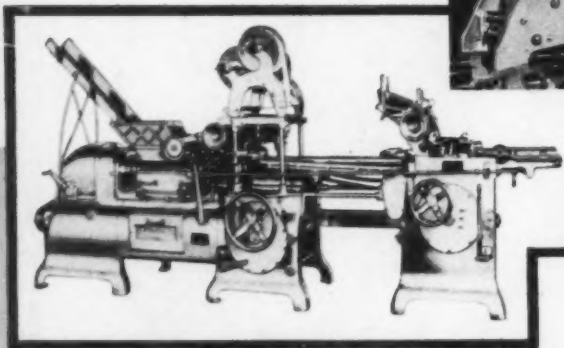
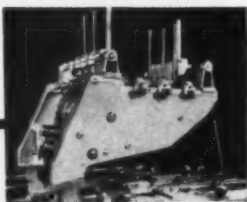
**Lynch explores new methods, expands
in new industries to bring you better
packaging . . . automatically**

THE LYNCH ROBO-LIFT ►

Fully automatic bucket elevating conveyor for operations requiring either or both horizontal and vertical movement of bulk product. Precision engineered for gentleness, sanitation, compactness and flexibility. Complete range of basic models—adaptable in height, length and accessory equipment to fit specific requirements from single units to complete systems.

NEW VACUUM FEEDER ATTACHMENT "V" FOR ALL LYNCH CARTONING MACHINES

— adjustable for any design, any size carton. See the new Morpac Vacuum Feeder in operation at our booth — PMMI Show, Cleveland.

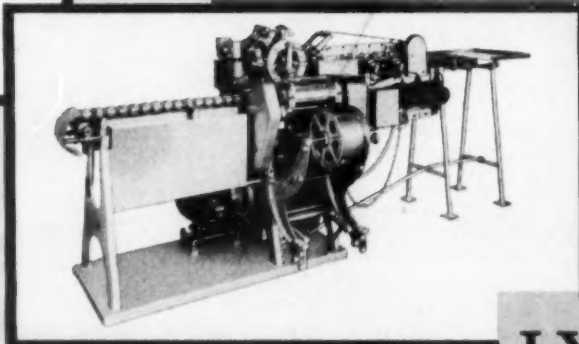


▲ THE LYNCH MODEL TK & O

Packages butter, oleomargarine and products of similar consistency. Accurately prints, wraps, cartons and/or overwraps in complete automation—exclusive with Lynch. Its unvarying accuracy in weight control, together with its greater production speed maintained throughout the operation, results in reduced production costs.

THE LYNCH MODEL RS ►

Attractively packages cookie and cracker sandwiches. Efficiently and economically handles the wrapping production of up to 100 multiple-unit packages of round or square cookie or cracker sandwiches per minute. Flavor and freshness are preserved at the same time. Lynch precision performance assures maintenance-free operation.



LYNCH CORPORATION
General Offices: Anderson, Ind.
Sales Offices: Anderson, Ind.
Wallington, N. J., Atlanta, Ga., Chicago, Ill.,
San Francisco, Calif., Export Dept.: Anderson, Ind.

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LYN
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LYNCH

and

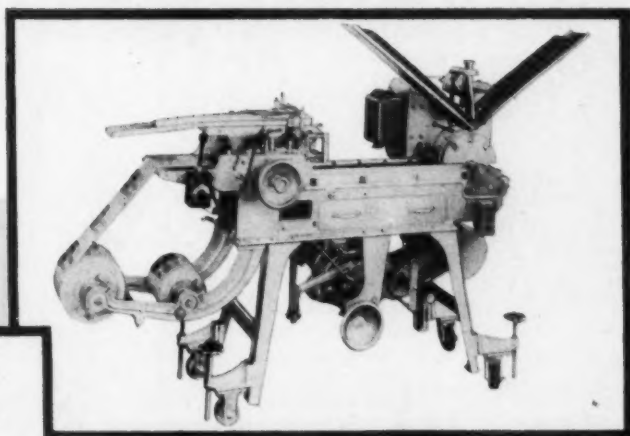
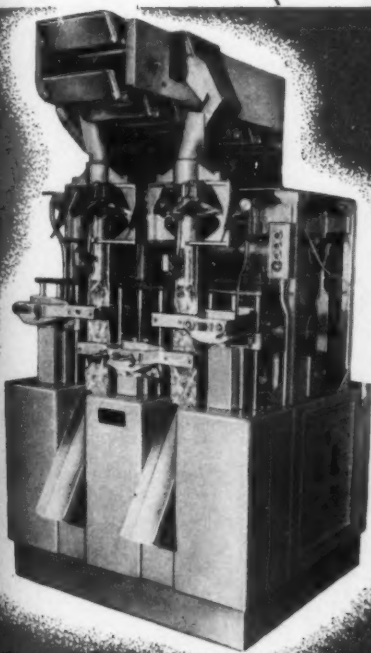
progress

Progress and performance are partners at Lynch!

The two newest members of the Lynch family, Robo-Lift and Robo-Wrap, demonstrate a continuing search for improved equipment to better serve the packaging industry. All over the world, Lynch machines are packaging candy, cookies, ice cream, foods, butter, oleomargarine and other products . . . with speed and economy . . . in efficient day-by-day performance!

◀ THE LYNCH ROBO-WRAP

In one continuous, completely automatic operation, the Lynch ROBO-WRAP unwinds the roll material, forms the package — simultaneously filling it with measured, weighed or counted product — heat-seals it, cuts it off. Packages a wide range of products — solids, powders, granules, liquids, creams, etc. Fully adjustable, package size changes can be made in minutes.

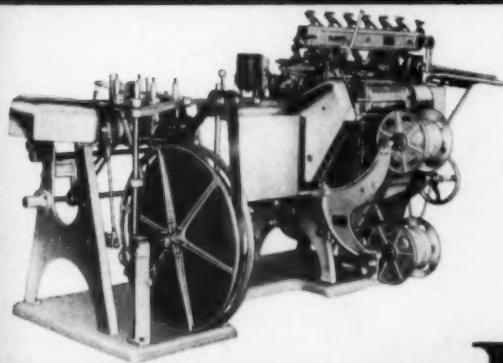


▲ THE LYNCH MODEL SMW

The Lynch Model SMW packages perfectly formed, tightly wrapped ice cream sandwiches. It makes, wraps and seals sandwiches from freezer to carton at speeds up to 100 per minute! Easily adapted to both 5c and 10c sizes. The accuracy, rapidity and operational economy of the Lynch Model SMW invariably lower production costs.

◀ THE LYNCH MODEL PB

Automatically packages confectionery and bakery products. These extraordinarily versatile machines wrap fragile, irregular and standard shapes — either single or multiple units — neatly, speedily, and economically. The Lynch Model PB keeps scrap loss at a bare minimum. Manhour requirements also are reduced to a minimum.



and its wholly-owned subsidiary,
LYNCH-ROBO CORPORATION
8 Hathaway Street, Wallington, N. J.

See us in Cleveland--Booth 314

Bracon ... SQUEEZE-TO-USE PACKAGING



Ocean Lotion...in color

Prelude to tan is TARTAN, McKesson & Robbin's suntan lotion, now brightly packaged in its new BRACON squeeze-to-use polyethylene bottle.

A bold scotch plaid, brilliantly printed in red and black on the yellow polyethylene bottle, provides immediate product identification. BRACON containers are printed by a unique method which eliminates expensive labels and decals... will not fade, wash off or smudge.

Consumers enjoy the added convenience of Tartan's new squeeze-to-use package. A gentle squeeze dispenses just the right amount of lotion, evenly and easily. Safe wherever it goes, this bottle will not chip, crack or break should the container be dropped or stepped on.

Protection and identification... shelf appeal and use appeal... all are yours when you package in BRACON containers. Leading manufacturers everywhere are taking advantage of these merchandising extras. Why not have your product analyzed for BRACON squeeze-to-use packaging—tubes, bottles or cans? Laboratory samples are provided without obligation. Write or phone:



BRADLEY CONTAINER CORPORATION

Maynard, Mass. — New York, Chicago, Los Angeles, Toronto

Plants and people

[Continued from page 207]

commercialization of a process developed by Standard Oil Co. of Indiana and licensed to Eastman Kodak.

Eastman Chemical Products, Inc., which markets all Eastman plastic products, has created a new chemical sales development section separate from its commercial sales department. William M. Gearhart has been appointed as manager. R. B. Herring, who had served as assistant to Mr. Gearhart, has been promoted to chief chemist in charge of the service and development laboratories of the company at Kingsport, Tenn.



May

The Nevins Co., Clifton, N. J., manufacturers of folding cartons and labels, has appointed Arthur May to the newly created position of director of marketing and promotion. Mr. May was formerly with Burke Dowling Adams, Inc.

International Paper Co., New York, reports that the expansion now under way at its Mobile, Ala., plant will make its facilities the largest paper manufacturing mill in the world. Its new section will house two paper mills, each with a nominal rating of 300 tons a day. One of the machines manufactures unbleached kraft bag and wrapping grades of paper; the other, newsprint. The new addition's 252,600-sq.-ft. roof is covered with 2-in.-thick Fiberglas Permaply, a new material developed by Owens-Corning Fiberglas Corp. to meet weatherproofing problems.

A re-organization of the sales department of International Paper's Bagpak Division divides the country into four sales regions. R. R. Worthington continues as divisional sales manager, with the new regional sales managers reporting directly to him. Lee Turner has been named Eastern regional sales manager, with headquarters in Baltimore; E. C. Miller is Midwest manager, with headquarters in Chicago; H. Carrie is Southern manager, in New Orleans, and R. A. Gair is the Western regional sales manager, headquartered in Denver.

William F. Thompson, Milwaukee division manager for Crescent Ink & Color Co., has been made a vice president of the company. Harry Turner has been named a southeastern representative for the Crescent Ink & Color Co. of Georgia.

The East Texas Pulp & Paper Co., which recently became wholly owned by Time, Inc., publishers, has a new slate of directors and executive officers. Charles L. Stillman, executive vice president and treasurer of Time, Inc., heads



PACKAGED TO LURE

...BY DENNISON



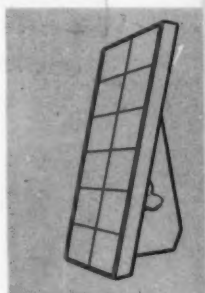
Who catches fishermen?

L & S does!

It's easy to see why.

L & S quality lures — Bass-Masters, Baby Cats, MirrOlures and others — are expertly packaged in transparent window set-up boxes. The covers are printed in rich red and black on gold stock. The packaging of *all* L & S lures has a family resemblance to speed customer identification.

Dennison designing provides another bonus at the point of purchase. An easel die-cut in the cover of the shelf carton provides a compact counter or window display.



A Dennison package for *your* product may net increased sales and profits. Dennison knows how to package for prominence in a way that suits your budget. Just drop a line to Dennison Manufacturing Company, Box Division, Marlboro, Mass. Offices in all principal cities.

LOOK TO

Dennison

FOR PACKAGING THAT REFLECTS THE
PERSONALITY OF YOUR PRODUCT



2 to 1

PREFERENCE
for automatic wrapping of
Frozen Products



FRIGIDINNER

praises the adaptability and efficiency
of their Hayssen Wrappers.



- A recent survey, made by one of the industry's largest national publications, revealed that Frozen Food Manufacturers use Hayssen Wrapping Machines by a margin of 2 to 1 over the nearest other make, and 4 to 1 over the next two. This overwhelming preference for Hayssen explains why it has become the standard of the industry. The Hayssen is completely automatic from the feed-in of the product to the ejection of the neatly, tightly overwrapped package ready for shipment. The Hayssen will wrap any size package in paper, film or foil, directly from roll stock with heat or glue seal.

Let our packaging engineers help you
with your packaging problems.

WRITE US TODAY for further information.

HAYSSEN

MANUFACTURING COMPANY

Dept. MP-8

Sheboygan, Wisconsin

First in Automatic Packaging, Since 1910

Albany • Atlanta • Boston • Chicago • Dallas • Denver • Detroit • Los Angeles • Minneapolis
New York • Philadelphia • St. Louis • San Francisco • Seattle • Montreal • Toronto

Plants and people

the board of the pulp and paper company. Serving with him as directors are David W. Brumbaugh, vice president and secretary of *Time, Inc.*; R. M. Buckley; Arnold W. Carlson, controller and assistant secretary of *Time, Inc.*; W. J. Carter; Artemus L. Gates; Roy E. Larsen, president of *Time, Inc.*; R. A. McDonald and W. E. Merrem. Mr. Buckley was named president of the pulp and paper company. The executive committee, headed by Mr. McDonald, consists of Messrs. Buckley, Larsen, Brumbaugh and Stillman. Named vice presidents are Messrs. Brumbaugh, Merrem, Clarke H. Morian, Jr., and A. G. Natwick. C. E. Cole is secretary and treasurer. Timberlands and other assets of Southwestern Settlement & Development Corp., have been vested in the pulp and paper company and will be operated as a division of the firm, with Mr. Merrem as general manager. No change in manufacturing or operating policy is contemplated.

A new glassine paper mill for the Pacific Coast, just completed by the R-W Paper Co. at Longview, Wash., is now in production, making protective



packaging papers for converters and food processors in the Western states. The mill is a joint enterprise of Weyerhaeuser Timber Co. and Rhinelander Paper Co., the latter company having recently become a subsidiary of St. Regis Paper Co. Weyerhaeuser Timber Co.'s Longview pulp mill (left background in photo above) is supplying pulp for the R-W paper mill under a long-term contract.

Harvey J. Engel has been elected a director of Einson-Freeman Co., Inc., Long Island City, N. Y., display lithographers, to succeed his father, the late Lawrence J. Engel. He has also been elected vice president of the company.

Kleen-Stik Products, Inc., Chicago, has appointed Fred Wolf as director of research and product development.

The Los Angeles plant of Pioneer Flintkote Co., maker of paperboard containers, was selected recently as the subject for a "Success Story" telecast. The program, sponsored by Richfield Oil Corp., features a different company

the S-Q-U-E-E-Z-E

is in the bottle but...



the
color makes the **SALE!**

It's not the ease of the squeeze . . . it's the COLOR of the bottle that moves it off the shelf. The lady on the shopping trip is the gal you have to please. Dazzle her with COLOR. Command her attention with COLOR. Give your bottle COLOR-POWER and see those profits climb.

When it comes to color, Westchester Plastics has the know-how from A to Z. We can custom-create for you the Polyethylene Molding Powder with unlimited COLOR-IMPACT. Or you can select from our wide range of standard colors. No matter how you buy, you are assured of quality color at quantity prices.

Write today for our booklet on how to capture the attention of the consumer through the carefully calculated use of color.



WESTCHESTER PLASTICS, Inc.

326 WAVERLY AVENUE, MAMARONECK, N. Y. • Mamaroneck 9-5980

Custom Compounders of Polyethylene Molding Powder and other Thermoplastic Materials
Manufacturers and Developers of Unicolor and Formacolor



Give Your Product That Luxurious Look

A secondary seal to insure product freshness and appearance. Oyster white, opaque, matte finish, vinyl—impervious to alcohol, moisture, oil or hot-packed products. Keep jar lids clean and dry.

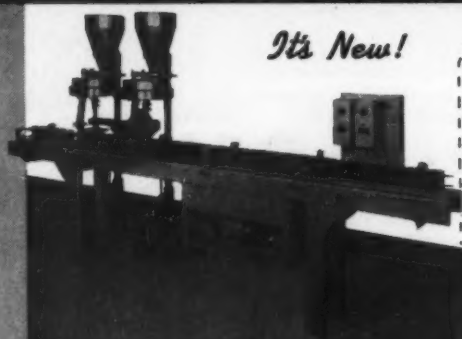
Your logotype embossed or hot stamped for beauty—printed directions or sales message on flat discs often eliminates a label.

Jar Discs cost surprisingly little—come in flat or formed, embossed or printed styles. Write for samples and quotations on your letterhead. Indicate sizes and quantity if possible with sample jar for exact fit.

THE WALTER FRANK ORGANIZATION

Design and sale of packaging components. Box 111C, Elmhurst, Ill.

AUTOMATIC FILLMASTER



It's New!

For Dry or Semi-Dry
Free Flowing
or Slow Flowing
Products



...fills any rigid container accurately
at speeds up to 240 A MINUTE

The AUTOMATIC FILLMASTER gives you high speed, without sacrificing accuracy. The exclusive FILLMASTER vibratory action fills every container with precise weight accuracy, within 1% for most products. All the single operator has to do is load the empty containers on the right hand end of the conveyor—FILLMASTER does the rest. The complete operation is controlled from a central control panel placed conveniently within the reach of the operator. Powders, coffee,

bread crumbs, nuts, candies, popcorn, etc.—the FILLMASTER handles every product with kid gloves to prevent damage. It's completely sanitary and noiseless too. High priced machine? No, the down-to-earth cost will surprise you for such a heavy duty machine. If you need continuous, unbroken, high speed filling, get all the facts about the AUTOMATIC FILLMASTER, three models to choose from. Write today for literature.

ALSO ASK US ABOUT OUR SEMI-AUTOMATIC BAG AND CARTON FILLERS

STUYVESANT ENGINEERING COMPANY

107 Stuyvesant Avenue, Lyndhurst, N.J.

Plants and people

or civic institution each week, giving the public a "behind-the-scenes" look at their operations.



White

Charles W. White has been appointed director of sales for Sonoco Products Co., Hartsville, S. C., manufacturers of paper cones, tubes, spools and other paper specialties. Mr. White, who replaces the late W. H. Miller, had been associated with Talon, Inc.

Newly appointed representatives for the Aerosol Div. of Bridgeport Brass Co., Bridgeport, Conn., are A. D. Jackson & Sons, 12-14 S. 17 St., Richmond, Va.; Tidewater Associated Brokerage Co., 109 W. Tazewell St., Norfolk, Va., and Glen Smyth Co., 4924 Greenville Ave., Dallas, Tex.

The Ever Ready Label Corp., New York, has named Thomas M. Britz, former production manager, as director of sales. New production manager is Russell C. Hopcraft. Warren A. Vierow, former advertising manager, is now director of marketing.

The Hayssen Mfg. Co., Sheboygan, Wis., now has a West Coast sales office in the San Francisco area, with Loyd C. Johnson in charge. Mr. Johnson is also in charge of sales and service for Northern California and the Northern Coast states. Address of the new office is 517 South B St., San Mateo, Calif.

The National Metal Edge Box Co., Philadelphia, has purchased a 23-acre site in Barrington, N. J., where a new structure will be built to house executive and sales offices and manufacturing facilities.

Paul A. Dillman has been appointed vice president in charge of sales for the H. D. Catty Corp., New York. Mr. Dillman formerly managed Catty's Norwalk, Conn., plant.



Mueller

Karl M. Mueller has been named vice president and director of manufacturing of the Crown Cork & Seal Co., Inc., Baltimore, Md. He will direct and coordinate the manufacturing operations of all 13 of the company's plants located throughout the U. S.

Standard-Knapp, Division of Emhart Mfg. Co., has established a New England district office, located for the present at the packaging machinery company's Portland, Conn., headquarters. A. J. Hetzel is in charge, with

Jay H. Samuels assisting him as sales engineer. The new office replaces an agency representation.



Pisarczuk

Fort Wayne Corrugated Paper Co., Fort Wayne, Ind., has created a packaging engineering service. Thaddeus Pisarczuk, formerly designer for the company's Chicago Division, has been appointed as packaging engineer. Armand L. Pressel has been named assistant sales manager for Fort Wayne's Hartford City Division.

Sinclair & Valentine Co., makers of printing inks, will start production this month at two newly constructed plants, one on Londonville Rd., Albany, N. Y., the other on Huber St., Atlanta, Ga.

Allied Chemical International Corp., New York, has appointed Canada Colors & Chemicals, Ltd., Toronto, as distributor for its polyethylene in Ontario and the Maritime Provinces.

George A. Oechsle, Jr., has been appointed assistant manager of the American Coating Mills Division, Elkhart, Ind., of Robert Gair Co., Inc., New York.

A new folding carton sales office has been opened by Gair in Dallas, with James W. Howry, formerly in the Kansas City office, in charge.

Alan Berni & Associates, Inc., New York package and industrial design organization, has been retained by the Hickok Mfg. Co. to head up its long-range program of packaging and point-of-sale display for self-service marketing of the company's products.

Production capacity of polyvinyl acetate polymers has been doubled at National Starch Products, Inc., new plant at Meredosia, Ill., as a result of an expansion program started last fall.

The Jiffy Mfg. Co., Hillside, N. J., is celebrating its 25th anniversary as a manufacturer of cushioning materials. Established in 1931 in Boston, Jiffy now has plants in New Jersey, North Carolina and Illinois.

New head of the field sales organization for Ekco-Alcoa Containers Inc. is James M. Walker. Wayne Marcoux has been promoted to sales development manager. New additions to the company's sales staff include Lloyd West, headquartered in Omaha, Neb.; Tom Leo, operating out of Alliance, Ohio; Bob Angsten, serving the south side of Chicago and adjacent areas.

The paper and plastics division of Portco Corp., packaging converter, has established a San Francisco sales office, with George Paul Heppes, Jr., as sales representative in the Bay area.

The Potdevin Machine Co., Teterboro, N. J., has accepted an invitation of the U. S. Dept. of Commerce to exhibit a bag-making machine at the Vienna Trade Fair, Sept. 9-16. The machine to

Something
goes into
this box
besides
interior
wall finishes...



NATIONAL FOLDING BOX

COMPANY DIVISION
FEDERAL PAPER BOARD COMPANY, INC.

SALES OFFICES: CHRYSLER BUILDING, NEW YORK 17, N.Y.; NEW HAVEN AND VERSAILLES, CONN.; SOGOTA, N.J.; BOSTON AND PALMER, MASS.; STEUBENVILLE, OHIO; PHILADELPHIA AND PITTSBURGH, PA.
FOLDING BOX PLANTS: SOGOTA, N.J.; NEW HAVEN AND VERSAILLES, CONN.; PALMER, MASS.; STEUBENVILLE, OHIO; PITTSBURGH, PA.
PAPER BOARD MILLS: SOGOTA, N.J.; NEW HAVEN, MONTVILLE AND VERSAILLES, CONN.; READING, PA.; STEUBENVILLE, O.; WHITE HALL, MD.



THE MAN FROM MARATHON knows what sells meat



The Man from Marathon confers with Marathon merchandising and packaging experts on package design. He is well qualified to recommend the best packaging for your meat products.

Ask the Man from Marathon
for complete information and samples of the many cartons and overwraps available to help you and your dealers build profitable meat volume, or write Marathon Corporation, Dept. 319, Menasha, Wisconsin.



He follows through every step of the way, checking packaging problems firsthand with production men to get a package that meets your needs.



He is aware of the problems involved and puts his expert knowledge of printing techniques to good use . . . to make certain that the printing run of your package is right!



He is a willing consultant on packaging problems at any time, instructing on the best way to package efficiently . . . to help speed production and protect your product.

MARATHON PACKAGES

SELL BRANDS • PROTECT PRODUCTS • SPEED PRODUCTION



WHATEVER MEAT YOU PACK . . . SEE THE MAN FROM MARATHON!

Plants and people

be on display will be the company's high-speed, self-opening square (block bottom) bag machine.

American Can Co., has expanded its general sales department and established four container divisions along product



Henschel

Poinier



Roberts

May

lines to take full advantage of present and future growth opportunities, according to Edward K.

Walsh, general manager of sales. The newly formed product divisions and the general managers in charge are: beverage containers, George F.

Henschel; fibre and plastic containers (including Canco's fibre milk container), Donald Poinier; food containers, Roscoe M. Roberts, and non-food containers, William F. May. Also announced by Mr. Walsh is the appointment of William E. Vaughn as assistant general manager of sales.

Dr. Kenneth W. Brighton, former associate director of American Can's research division, has been appointed general manager of the New Products Department.

American Can has started production at its new plant in Salem, Ore. When in full operation, the plant will have an annual rated capacity of 240 million containers. J. G. Griffin is manager.

Gomar Mfg. Co., Newark, N. J., manufacturer of metallized plastic sheeting and plastic laminates, is moving this month to its new plant at 1501 Blanche St., Linden, N. J.

Arthur G. Ringlen has been appointed to the newly created position of chief engineer of the J. E. Plastics Mfg. Corp., New York, makers of acetate containers. Mr. Ringlen will have charge of converting the plant to automation. Jules A. Gutterman has been named sales manager for the firm.

A Uni-Crest Div. of the United Cork Companies has been set up with William E. Stewart as Eastern sales manager at Kearny, N. J., and Hugo Stowasser as Midwestern sales manager at 1151 Eddy St., Chicago. United Cork has acquired a U. S. license for the European Uni-Crest process of manufacturing an expandable polystyrene

and molding it into finished products. Original patents are owned by the Badische Anilin & Soda Fabrik A. G. of Ludwigshafen, West Germany. United Cork will establish specialists in all its branch offices to handle sales and engineering problems pertinent to the use of Uni-Crest.

The Stocker Mfg. Co., Netcong, N. J., has opened an office and warehouse on the West Coast, at 1485 Bay Shore Blvd., San Francisco. Jim Murray will handle sales of Stocker's Gumming Div., which includes sealing tapes, corrugated tapes, reinforced cloth, etc.

John Fitting, Jr., has been appointed director of packaging for the Wyomissing Glazed Paper Co., Reading, Pa. The company has recently installed equipment enabling conversion of its products into roll or sheet-cut labels.

Gotham Ink & Color Co., specialists in printing inks for papers, plastic films and foils, is now in full operation in a recently completed addition to its plant at 5-19 47 Ave., Long Island City, N. Y.

Twinkpak, Ltd., of Montreal and Toronto, has been appointed Canadian representative for the Gomar Mfg. Co., Newark, N. J., makers of continuous roll and sheet plastics and plastic laminates. Robert D. Asch, sales manager, will have charge of the Gomar representation.

Dr. E. M. Hutterer has joined the sales department of Hansella Machinery Corp. (N. J.), Englewood, N. J., to serve the confectionery industry. Dr. Hutterer participated in bringing the German Hansella machines to the U. S. and Canada after the last war.



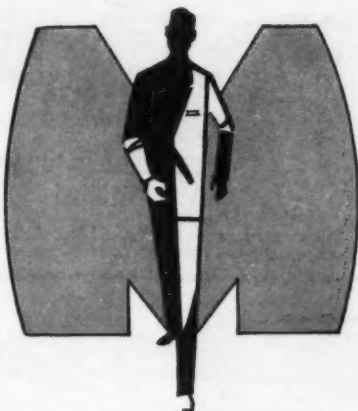
Fisher

Harold F. Fisher has been named specialty products manager for the Chester Packaging Products Corp., Yonkers, N. Y. Mr. Fisher was formerly with the Woolfoam Corp. and prior to that was associated with the Diamond Match Co.

James F. Herslow has been appointed general sales manager of the Lusteroid Container Co., manufacturer of plastic vials and tubes, Maplewood, N. J., and an associated firm, Sillocks-Miller Co., maker of plastic specialties.

Paul Mayfield has been elected a vice president and member of the executive committee of Hercules Powder Co., Wilmington, Del. J. B. Johnson has resigned from the executive committee, but continues as a vice president and board member. G. Fred Hogg is now general manager of the Naval Stores

It will pay you to talk to the MAN FROM MARATHON



... no matter what
you package and sell

Though the Man from Marathon on the facing page is a meat specialist, he is only one of nearly 200 Men from Marathon. Each devotes 100% of his time to one line of products. Not only meat, but also baked foods, frozen foods and dairy products. In addition, a group of Men from Marathon spends full time on fresh fruits and vegetables, tobacco, sugar and many other products.

Every Man from Marathon draws freely on Marathon's 45 years of experience in making packages that make sales. Call any Marathon sales office (in all major cities) for the free packaging counsel of the Man from Marathon who knows *your* field. Or write directly to Marathon Corporation, Menasha, Wis.



MARATHON PACKAGES

Menasha, Wisconsin

In Canada: Marathon Packages Limited, Toronto

POTDEVIN Packaging Equipment

Reduces Manufacturing Costs!

Speeds-up Production!

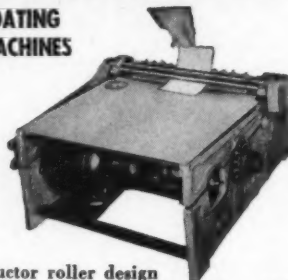
Improves Quality!



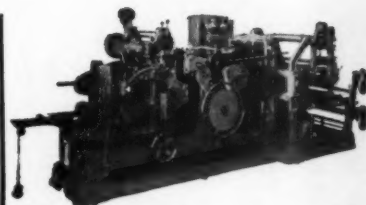
**SELF-OPENING-SQUARE
BAG MACHINES**

High speed production of 11"x6"x21" shopping bag or multi-wall baler bags.

COATING MACHINES



Ductor roller design in 6, 9, 12 and 18 inch widths.



**CELLOPHANE
BAG MACHINERY**

Models for single, duplex, flat-and-square, satchel-bottom bags.



**S.O.S. GROCERY
BAG MACHINES**

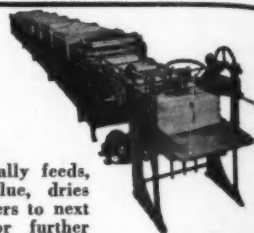
Converts rolls of Kraft or sulphite paper into finished, trade-marked bags. Adjustable for 1/4 lb. to 35 lb. inclusive.

OIL INK PRINTING PRESSES

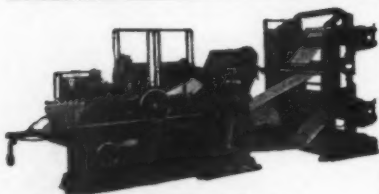


Wide range of types and sizes including one to six colors for drinking cup paper, coffee, sugar, flour bags, cellophane, glassine, parchment etc.

STRIP GLUERS



Automatically feeds, applies glue, dries and delivers to next station for further processing. Adjustable up to 21" wide.



**FLAT & SQUARE (Tucked)
PAPER BAG MACHINES**

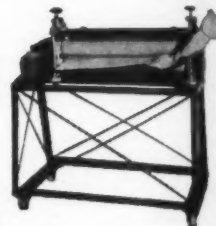
High speed production of grocery, notion, millinery, and large specialty bags. Adjustable for large range of sizes.

SHEET COATING MACHINES



For any type hot or cold material. Sizes up to 54 inch widths and larger for sheet or roll coating.

ROTARY COMBINING PRESSES



High speed combining of glued materials up to 1/2" thick and 42" wide. For hand feeding flat sheets or in production line for web materials.



COLLAPSIBLE TUBE LABELERS

Applies 32 slip labels per min. to collapsible tubes. Automatically forms label and ejects label on tube. Machines for 1/8, 1/4, 1/2, 1 ounce tubes.

VIAL & AMPULE

LABELER & CODER



Thermoplastic labelers in 1, 2, 3, 5 and 10 cc sizes. Hopper automatically feeds vial or ampule for labeling and coding.



**SACK (Satchel-Bottom)
PAPER BAG MACHINES**

Wide range of sizes for making single or multi-wall poultry, charcoal, potato, flour sacks and shopping bags.

POTDEVIN has been designing and building superior quality equipment for the packager since 1893. Consult our engineers on any problem. No obligation. Write for detailed information on any equipment illustrated in this ad.

Visit our Booths Nos. 663, 665 at the PMMI Show, Cleveland.



POTDEVIN MACHINE CO.

244 North St., Teterboro, N. J.

Designers and manufacturers of equipment for Bag Making, Printing, Coating, Laminating, Gluing and Labeling

Plants and people

Dept. to succeed Mr. Mayfield. John H. Long is general manager of the Paper Makers Chemical Dept. to succeed R. Rockwell, who has retired.



Arndt

Gaylord Container Corp., Div. of Crown Zellerbach Corp., has appointed Joseph M. Arndt, Jr., as director of national account sales for the Gaylord Shipping Container Division. He was formerly sales manager of Gaylord's Central Division in St. Louis.

Robert S. Baum has been named manager of Gaylord's beverage box sales department.

Thomas F. Huntington has been advanced to the newly created position of sales and merchandising manager of the Cel-Fibe Division of Personal Products Corp., Milltown, N. J., one of the Johnson & Johnson companies. Cel-Fibe cellulose wadding is used in civilian and military protective packaging.



Heinemann

W. A. Heinemann has been appointed to the newly created post of advertising manager of Visking Corp.'s Plastics Division. Mr. Heinemann was formerly assistant advertising manager for the company. He will headquarter in Terre Haute, Ind.

Charles E. Howard has been promoted to the newly created post of manager of attachments, The Yale & Towne Mfg. Co., Philadelphia. The separate managership was created to coordinate the expanded demands for lift-truck attachments for materials handling.

The Milwaukee Shipbuilding Corp., Milwaukee, Wis., which has been devoting its facilities for the past few years almost exclusively to the building of paper and paper converting machinery, has changed its corporate name to Paper Machinery Corp.

Jim Nash Associates, New York design firm, has been re-organized as Jim Nash Associates, Inc. Officers of the new corporation are Jim Nash, president; Russell S. Dixon, vice president in charge of surface design; Charles F. Pfeiffer, vice president and consultant on materials and machinery; M. D. Nash, vice president, secretary and treasurer. Offices and studios are now located at 527 Madison Ave., New York.

Construction of two new plants for the production of low-pressure polyethylene has been announced by Union Carbide & Carbon Corp., New York. The two plants, located at Institute, W. Va., and

Oneida Quality



Matchless Achievements in Packaging

Every year Oneida sets a new high in quality packaging. And every year Oneida-packaged products win new sales peaks. Today, choose Oneida quality for your product—the highest achievement in packaging. Check Oneida now.

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Los Angeles, Calif. • Baltimore, Md. • Centralia, Ill.

CONVERTERS and COLOR PRINTERS of Quality Packaging from: Glassine, Cellophane, Polyethylene, Vinyl, Parchment, Sulphite, Foil, Kraft, Waxed, Coated and Laminated Materials.

'66 Codedge '99

LABEL DATING AND CODING MACHINE
U. S. A. PAT. NO. 2843718, BRIT. PAT. NO. 869426, AND OTHER FOREIGN PATENTS

DATES and CODES 2000 LABELS PER MINUTE!



See us in Cleveland
at Booth 502 PMMI Show
Sept. 11-14.

Used by many leading packers because it cuts
costs—saves time—does not deface label.

CODEDGE handles labels of any size or shape, small cartons, film bags and wrappers. Provides any control information desired — date, batch, machine, operator, etc. Quickly, easily read code leaves no defacing mark. Initial cost and operating cost surprisingly low. Write for full details to:

GRIFFIN-RUTGERS INC., 41 East 42nd Street, New York 17, N. Y.

DEPT. M

Sole U.S. Distributor

CAN SEAMERS

Machine has individual seaming heads and tables. Is designed to operate in production lines handling dry chemicals, cleansers, abrasives, metal polishes, etc. A proven, high-speed, fully automatic, continuous rotary CAN SEAMER designed to apply metal closures on round metal or paper bodied containers.

Features.... • SPEEDS EXCEEDING 300 PER MINUTE

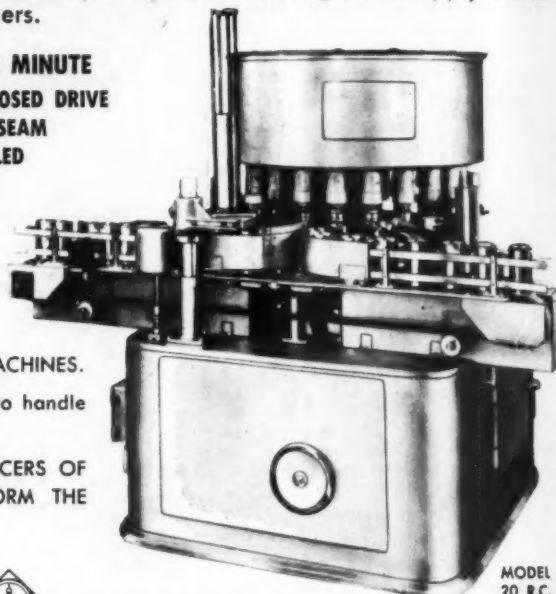
- AUTOMATIC COVER DROP • ADJUSTABLE • ENCLOSED DRIVE
- DRIVEN SEAMING CHUCKS • PRODUCES A DOUBLE SEAM
- DOUBLE LIFE SEAMING DIES • MOVING PARTS SEALED
- TABLES, CHUCKS & SPINDLES QUICKLY REMOVED
- ONE MOTOR DRIVES ENTIRE MACHINE & CONVEYOR
- NO SKILLED HELP REQUIRED TO OPERATE!
- STURDILY BUILT FOR LONGER, TROUBLE-FREE LIFE AND LOW MAINTENANCE COST!

THE REQUIREMENTS OF THE INDUSTRY HAVE BEEN CAREFULLY CONSIDERED IN THE DESIGN OF THESE MACHINES.

The photograph shows one of several models designed to handle a variety of container sizes.

THESE MACHINES ARE IN USE BY THE MAJOR PRODUCERS OF CLEANSERS, LYES, BOWL CLEANERS, ETC., AND FORM THE BACKBONE OF THEIR PRODUCTION LINES.

Your Inquiries Are Invited On Automatic Or Hand Sealers.



MODEL 20 R.C.

MANUFACTURED BY

JOHN R. NALBACH

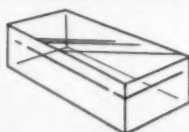


ENGINEERING CO.

6139 OGDEN AVENUE

CHICAGO 50, ILLINOIS

It's



VIZ-PAK
transparent packaging

*that makes
good things
look better*



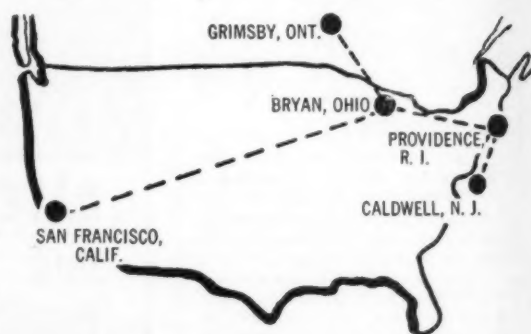
Free Samples Furnished
Upon Request

World's largest manufacturers of acetate containers

J. E. PLASTICS MFG. CORP.

Development Division

855 West 23rd Street - New York 11, N. Y.



5 CONVENIENT SPOTS
for obtaining engraving rubber
and refrigerated molded rubber **IN A HURRY**

"U. S." grows its own natural rubber and makes its own synthetic rubber. "U. S." has the vast resources, the experience and the technical staffs essential in producing the best in rubber for printing plates. For always fresh rubber, call our distributor, Williamson & Co., at any of the following refrigerated stocking plants:

Caldwell, New Jersey • Bryan, Ohio
San Francisco, Calif. • Grimsby, Ont.
or contact our Providence, R. I., plant.



Mechanical Goods Division

United States Rubber

Plants and people

Seadrift, Tex., with a combined rated annual capacity of 55 million pounds, are scheduled for completion next year.

Harry N. Eidswick has been elected treasurer of National Can Corp., Chicago, to succeed G. T. Pfifer, who has resigned.

Pacific Plastic Products, plastic injection molders, San Francisco, have completed construction of a new building adjoining their present plant. The addition brings the total size of facilities to 32,000 sq. ft. of space.

Permacel Tape Corp., New Brunswick, N. J., has purchased LePage's, Inc., Gloucester, Mass. Permacel, makers of pressure-sensitive tapes, is a wholly owned subsidiary of Johnson & Johnson. LePage's will continue as a separate company with its own management.

Four promotions have been announced by Anchor Hocking Glass Corp., Lancaster, Ohio. R. N. DeMerell has been



DeMerell Lawrence

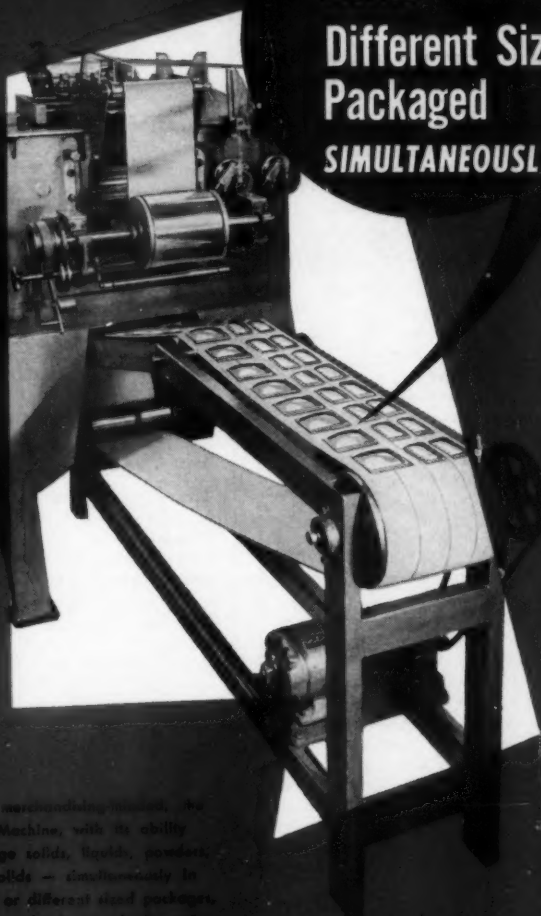


elected vice president, national package accounts. He will continue to headquarter at the company's New York sales office. E. M. Lawrence, with headquarters in Lancaster, has been elected vice president, sales administration. Both will report to S. B. DeMerell, vice president in charge of the packaging division. W. W. Smeck, sales manager of the tableware division in Lancaster, has been elected vice president, sales. R. F. Murray, in charge of the New York tableware sales office, has been named vice president, tableware and syndicate sales for the Eastern division, in addition to his present duties.

Nelson Carman has been appointed manager of inventory control for the Arthur Colton Co., Detroit, machinery manufacturer. Arthur Pearce has been named director of customer service.

Production has started at the new Terre Haute, Ind., plastic package plant of Bemis Bro. Bag Co., St. Louis. Office functions previously carried on at the Bemis flexible package plant in Chicago have been moved to the new plant,

Different
Items
Different Sizes
Packaged
SIMULTANEOUSLY



For the merchandising manager, the Bell-Pak Machine, with its ability to package solids, liquids, powders, or semi-solids — simultaneously in one size or different sized packages, enables completely new horizons in merchandising.

Tension packages or attached "side-by-side" allow unlimited promotion for in-store merchandising. "Popcorn and Oil", attached; "Wave Action and Barbecue", attached; "Coke Mixes and Dry Egg Whites", attached; "Fanning mixes" plus scores of other combinations can now — on a Bell-Pak Machine — be packaged accurately, at high speeds, with obvious economy.



BELL *pak*

THE BELL MACHINE COMPANY
OSHKOSH WISCONSIN

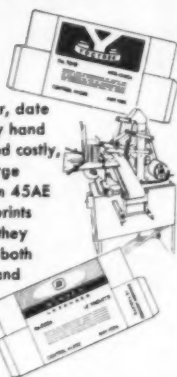


MARKEM

solved these
marking problems

imprinting flat boxes

... with batch number, date and product detail by hand stamping was slow and costly, meant maintaining large inventories. A Markem 45AE machine now feeds, prints and stacks boxes as they are needed, saving both inventory costs and hand stamping time.



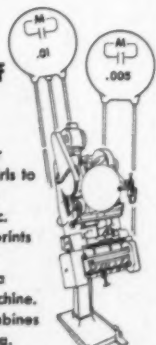
decorative marking on plastics

... required application of gold color to raised designs on a plastic vanity set. Markem recommended a 25A machine equipped with sponge-mounted rubber printing plates for the job. Boxes, mirrors, combs, and brushes are now attractively marked, with a single impression.



identification of flat capacitors

... by an electronic component manufacturer formerly required 12 girls to hand print data such as capacity, trademark, etc. The manufacturer now prints them in gang strips, at production rates, using a single Markem 25A machine. A cutter attachment combines lead cutting with printing.



Need better product, part or package marking?

Call Markem Machine Co.
Keene 1, New Hampshire



Plants and people

which is equipped with the latest in high-speed polyethylene bag manufacturing and printing equipment. The move to Terre Haute expands production and combines under one roof plastic sales, production, engineering, research and development.



Allen
Before joining Crown Mr. Allen was general manager of Standard-Knapp.

Robert Allen has been named consultant on machinery sales by Crown Cork & Seal Co., Inc., Baltimore, Md. In this newly created position, Mr. Allen will be responsible for the planning aspects of the company's machinery sales at the corporate level.

The Dow Chemical Co., Midland, Mich., has formed an Eastern Research Laboratory at Framingham, Mass., with Dr. Fred W. McLafferty as director. The new laboratory will be responsible for fundamental research on a long-range basis in various fields, including the areas of organic and inorganic chemicals and plastics, and will also carry on analysis and testing work.

Dow's New Orleans sales office is now located at 305 Maritime Bldg.

George A. Fendrick has been appointed Cleveland district manager, Packaging Div., The Dobeckmun Co., Cleveland, Ohio, packaging converter.



Fendrick
Also assigned to the Cleveland packaging sales office is Richard McNerney, who will assist Mr. Fendrick. Mr. Fendrick succeeds Fred E. Bell, who has been named Los Angeles district manager, Packaging Div. Mr. McNerney replaces William F. Toomey, who is no longer with the company.

Frederick W. Blackburn, formerly with Johnson & Johnson, has joined Lily-Tulip Cup Corp., New York, as director of selling operations.

John W. Pearson has joined the New York sales force of The Lord Baltimore Press, Baltimore, Md., as assistant to Morton M. Dukehart, director of the Multi-Unit Packaging Division.

William L. Niclaus has been re-elected president and chairman of the board of directors of Wilpet Tool & Mfg. Co., Kearny, N. J., plastic packaging specialists.

L. F. Shattuck, 1299 W. Peachtree St., N.W., Atlanta, Ga., has been appointed to represent Peters Machinery Co., Chi-

cago, makers of packaging machinery, in Alabama, Georgia, North Carolina, South Carolina and Florida.

Ten new pieces of equipment have been added to the plant of W. C. Ritchie & Co., Chicago, subsidiary of Stone Container Corp., completing the first phase of an improvement program started when Ritchie became a Stone subsidiary last year. The new machinery has increased production capacity, as well as potential volume and flexibility in the manufacturing of folding cartons, set-up boxes and fibre cans.

Deane F. Wicks has been appointed Eastern district sales manager of the Raymond Bag Corp., Multiwall Bag Div., The Albemarle Paper Mfg Co., Middletown, Ohio. His headquarters are at 21 West St., New York.

Fred H. Freuler has been promoted to the position of research associate in West Virginia Pulp & Paper Co.'s Research Center at Covington, Va. In his new position, Mr. Freuler will have charge of a section of the laboratory devoted to papermaking research.

The F. J. Stokes Machine Co., Philadelphia, has changed its corporate name to F. J. Stokes Corp. The new designation is believed to be more in keeping with the company's varied line of equipment.

Walter M. Young has been named director of sales for Richardson Scale Co., Clifton, N. J. John Aquadro now heads the electrical engineering department, replacing Mr. Young in that capacity.

St. Regis Paper Co., New York, will begin construction of a new pulp and paper laboratory this fall at its mill in Pensacola, Fla. The laboratory, to cost approximately \$330,000, will also house the company's plant engineering staff. Facilities will include the newest equipment for making chemical analyses of wood chips, pulps and papers.

St. Regis is now occupying headquarters in the new Socony-Mobil building at 150 E. 42 St., New York City. All divisions of the company will move to the new location.

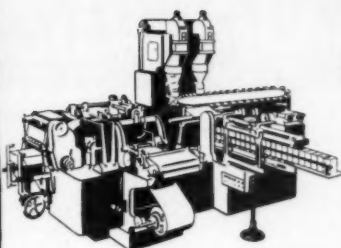
Facilities of its Kalamazoo, Mich., paper mill have been leased by St. Regis to the Allied Paper Div., Thor Corp., Chicago.

Eberhard Berten, manager of the American sales organization of the German firm of Hansella-Werke, Albert Henkel A.-G., died on June 9 at the age of 51. He had been with the firm for more than 30 years.

HESSER

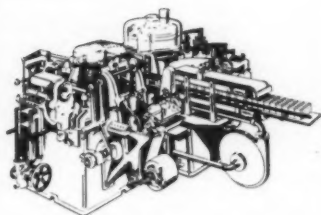
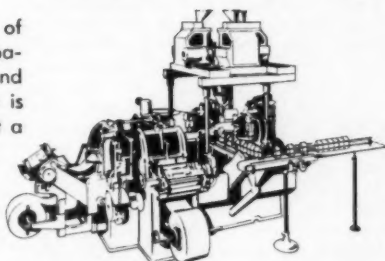
is the name to remember.

Many new **HESSER** packaging machines are now operating in the USA and Canada.



For Flour. This is a new machine for packaging flour in quantities of 2 lbs. type PDKB IV. On this machine single or double paper bag packages are produced, filled and closed. The inner paper is fed from the roll, and the outer label from the magazine, or from the pre-printed roll with photo-electric registration. An excellent weight accuracy is obtained by means of two special auger fillers, and the new and outstanding feature on this machine is a vibrating chain resulting in bags that have exceptional firmness. The packages are absolutely tight in spite of the comparatively high output which is in the neighbourhood of 55-58 packages per minute. A special advantage of this machine is the small floor space with only abt. 12x15 ft. Power: abt. 5 H. P. Attendance: Normally 1 person (excluding container packing). Upon request a device for inserting a leaflet or a picture on top of the flour can be supplied.

For Coffee. Our machine type PDVR IIIa is for packaging 1 lb. of coffee into double paper bags with tin tie closure. The inner paper as well as the pre-printed outer label is taken from rolls, and the cut-off is registered by photo-electric eye. The machine is equipped with 3 double precision weighers, and operates at a speed of about 55 packages per minute.
Floor Space: 8x14 1/4'
Drive: abt. 3 1/2 H. P.
Attendance: normally 1 person (excluding container packing).



For Powdery Products, such as Instant Pudding, Jelly Powder etc. For packaging these products our new improved and very efficient machines type PDHJ IIa have been developed. On this machine carton packages with inner liner which can be heatsealed at the bottom, at the longside seam and the top are produced, filled and closed. Inner liner from roll and outer carton from magazine. The machine shown, although equipped with a plate type filler can also

have an auger, scales or combinations of same. Upon request a device for inserting a leaflet between inner liner and outer carton can be supplied with the machine.
Output: up to 80-85 packages per minute.
Floor Space: abt. 9 3/4 x 9 3/4'.
Power: abt. 4 H. P.
Attendance: normally 1 person (excluding container packing).
Also so-called fin-sealed inner bags can be made on coming models.



Machine for packaging different products into set-up cartons. This machine type PU which works from the pre-glued skillet is our newest development and has found high interest. It is especially appropriate for washing powders and detergents, and it operates with a speed of about 300 packages per minute and more. Smaller and simplified models with an output of 150-180 packages per minute are available. The machine shown in the photograph is equipped with automatic plate type filling device, and the smaller model could also be supplied with scales. These are only a few of the outstanding examples of our new developments. Our whole manufacturing program includes more than 80 different machine models for the entire food industry (macaroni, sugar, salt, tea cereals, soups, flour, coffee, pudding powders etc.) and for soap powders as well as wrapping machines, printing, punching and sheeting units, bundling machines, weighers and volumetric fillers.

Eastern USA
GEVEKE & CO., INC.
25 Broadway, New York 4, N.Y. - USA

Western USA
JAMES HALE & CO.
282 Seventh Street, San Francisco - Calif.

CANADA and LAKE DISTRICT
PACKAGING EQUIPMENT
Service Limited - 124 Willowdale Street,
Willowdale, Ontario

FR. HESSER

MASCHINENFABRIK AKTIENGESELLSCHAFT STUTTGART-BAD CANNSTATT

For your information

Dates for the 1957 annual meeting of the Folding Paper Box Assn. of America have been changed to March 31-April 4. The meeting will be held at the Drake Hotel, Chicago. Dates for the association's annual folding paper box competition are Nov. 1 to Dec. 31.

Deadline for entries in the Third American Package Design Exhibition and Awards Competition, sponsored by the Packaging Designers Council, is set for Nov. 1. A new feature of the 1956 competition will be a cash award of \$1,000 donated by the Aluminum Co. of America for presentation to the designer of the package that best illustrates effective application of aluminum foil. In addition to the Irwin D. Wolf Award, awards in 21 different categories will be presented to designers and Certificates of Recognition will be given to product manufacturers and packaging suppliers responsible for all award-winning packages. Further information on the competition is available through the Package Designers Council, 12 E. 46 St., New York.

The National Assn. of Permanent Display Producers, Inc., New York, have elected the following officers for the coming year: Robert Kayton, Robert Kayton Associates, president; Charles Peckar, Chaspec Mfg. Co., first vice president; Sam Krebs, Copeland Displays, second vice president; Elliott Loew, POP Displays, Inc., treasurer, and Al Orville, General Display Case Co., secretary.

Manufacturers engaged in metal coating plastic films by vacuum processes have organized a trade association called Vacuum Metallizers Assn. President is Milton Hammer of the National Metalizing Corp.

A proposed Simplified Practice Recommendation for Glass Bottles for Drugs and Pharmaceuticals has been submitted to producers, distributors, users and others for their review and acceptance. Proposed by the American Drug Mfrs. Assn., it is designed to establish size standards and specifications for Blake, wide-mouth and narrow-mouth round glass bottles. Mimeographed copies of the proposed recommendation may be obtained from the Commodity Standards Division, Office of Technical Services, U. S. Dept. of Commerce, Washington 25, D. C.

"Industrial Design in Germany," a 350-page book published by Econ-Verlag, GmbH, Dusseldorf, Germany, is illustrated with photographs of 192 well-designed industrial products manufactured in Germany since World War II and displayed at the 1953 German Industries Fair in Hanover. The book

also includes articles on "The Development of Industrial Design in Germany" and "Thoughts and Experiences of the Industrial Designer." The text is in German, English and French.

The Packaging Institute has just published another of its industry-wide Advisory Service Reports, #347, which lists surprisingly wide variations in the per cent of overrun and per cent of underrun considered acceptable by a cross-section of industry in the purchase of 10 major types of packaging materials. The report was compiled from replies to a questionnaire by 115 companies representing 27 categories of users and suppliers of packaging materials. Copies are offered by the Packaging Institute, 342 Madison Ave., New York 17, at \$3 each to PI members and at \$5 a copy to non-members.

Frank W. Cray, vice president of the International Printing Ink Div. of Interchemical Corp., has been elected to the PI board of directors.

Edward W. Love, production manager of Bristol-Myers Product Div., has been appointed vice chairman of the PI Technical Committees Production Division. Charles J. Zusi of Container Laboratories has been named chairman of the PI Adhesion Committee.

The first West Coast chapter of the Industrial Designers Institute has been established in the San Francisco Bay Area. Richard Ketcham, Redwood City, is chairman of the new chapter. Other officers are George Kosmak, vice chairman; Donald W. Brundage, secretary, and Gross Wood, treasurer.

Twenty foreign countries will have exhibits at this year's Fifth Annual Canadian Packaging Exposition, to be held in Toronto, Nov. 6-8. Packaging firms from the United States, England, Germany, Australia and Argentina have contracted for space. General chairman of the exposition, which is sponsored by the Packaging Assn. of Canada, is T. M. Dutton of Wonder Bakeries.

A new 44-page book published by Champlain Co. discusses the history, advantages and types of roll-fed cutter-creater equipment available to the carton manufacturer. A section is devoted to tracing the flow of a web through a complete cutter-creater operation. Included are 29 photographs and drawings of complete presses as well as individual components. For copies, write on company letterhead to Champlain Co., 88 Llewellyn Ave., Bloomfield, N. J.

Recommended specifications for nailed wooden and lock corner boxes for both domestic and export shipments of industrial items has been released by the

National Wooden Box Assn. for the guidance of container users. The new specification, I-1A, supersedes the industry's tentative specification as previously issued. Designed for general commercial use, it is not intended to supplant Government specifications when applicable, nor ICC regulations when they apply to the shipment of specific items. Single copies of the new specification are available on request to the National Wooden Box Assn., Barr Bldg., Washington 6, D. C.

Nine basic rules for efficient stacking and loading are discussed in a new edition of "How to Stack and Load Corrugated Shipping Boxes," a 16-page booklet in the H & D Little Packaging Library series. Copies of this illustrated booklet are available on request to Hinde & Dauch, Sandusky, Ohio.

Registration dates for the evening packaging classes for college credit at the Illinois Institute of Technology, Chicago, are Sept. 10-11. Classes, which are held for 17 weeks, start the week of Sept. 17. J. F. Carrigan of Spiegel's packaging engineering department is the instructor of the course titled Packaging Materials and Methods, I.E. 326. W. L. Dalton of Container Laboratories will instruct the course in Industrial Packaging Design and Construction, I.E. 327. Tuition is \$52. For further details, write to the Illinois Institute of Technology, Dept. of Industrial Engineering, Technology Center, Chicago 16.

A comprehensive report on modern practices in plant maintenance and en-

What's doing

Aug. 26-29—National Assn. for the Specialty Food Trade, 2nd annual National Fancy Food & Confection Show, Sheraton-Astor Hotel, New York.

Sept. 10-12—Packaging Institute, 18th Annual Forum, Hotel Statler, Cleveland, Ohio.

Sept. 11-14—Packaging Machinery Mfrs. Institute, Packaging Machinery & Materials Exposition, Public Auditorium, Cleveland, Ohio.

Sept. 16-22—American Society for Testing Materials, 2nd Pacific Area National Meeting and Apparatus Exhibit, Hotel Statler, Los Angeles.

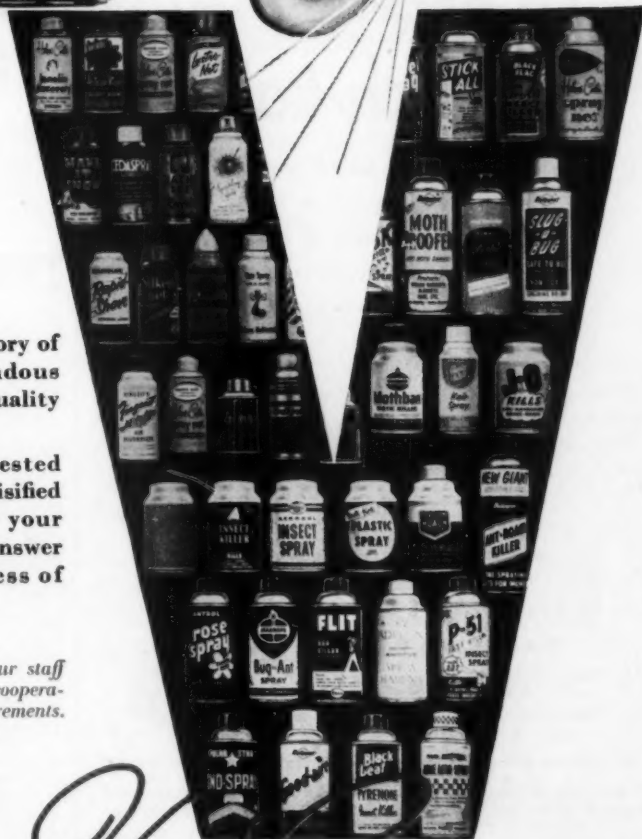
Sept. 17-21—11th Instrument-Automation Conference and Exhibit, Coliseum, New York.

Sept. 19-22—National Paper Trade Assn., fall meeting, Conrad Hilton Hotel, Chicago.

Sept. 23-25—Produce Prepackaging Assn., 6th annual convention, Fontainebleau Hotel, Miami Beach, Fla.

the *PRECISION VALVE* for Your Product

*"Known
throughout
the World"*



The picture tells a story... the story of over-whelming popularity, tremendous growth and continued reliance on a quality product... **PRECISION VALVE.**

The use of over 300,000,000 time-tested valves by hundreds of completely satisfied customers throughout the world, is your assurance that **PRECISION** has the answer to your aerosol program regardless of product or container.

We invite your inquiry to enable our staff of aerosol valve technicians to work cooperatively in satisfying your valve requirements.



Precision Valve Corporation

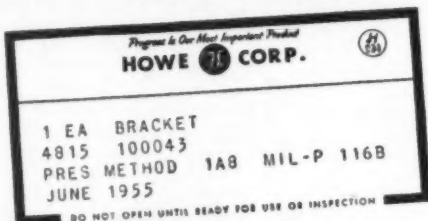
700 NEPPERHAN AVENUE • YONKERS 3, NEW YORK

one
*
manufacturer

saves

\$117,413

in one year by using the
Monarch System of imprinting



Tickopres and Monarch Labels

- reduce direct labor costs 67%
- prevent waste of costly manufacturing space • cut down label handling operations

* Name on request

You can save time and costly space and expensive labor costs by producing speedy, neat, printers' style work right in your plant. By cutting down label handling operations, the Monarch System reduces direct labor costs and prevents waste of manufacturing space. By installing a TICKOPRES and MONARCH LABELS in your work, you avoid costly delays in delivery.

For information, attach samples of your present labels, or an outline of your imprinting problem, to the coupon and mail to us.

-----TEAR OUT AND MAIL-----
The MONARCH
Marking System Company
(Retail & Industrial Marking Systems)

216 South Torrence Street, Dayton 3, Ohio

Without cost or obligation to us: send information about Tickopres and Monarch labels. Show us how we can save imprinting time and money.

Name _____ Title _____
Company _____
Street _____
City _____ Zone _____ State _____



NOTHING STICKS to TEFLON-IZE

- A modern packaging aid that cuts costs, speeds heat sealing, gluing, packaging, conveying
- Non-adhesive coating—Resists heat to 500° F.

First choice of leading heat sealing equipment manufacturers because Teflon-Ize prevents sticking of plastic films such as polyethylene, vinyl, saran and cellophane.

Versatile Teflon-Ize products, made by Chicago Gasket Company, are available in many forms to meet every packaging machine requirement.

• **SELF STICK TEFLON ADHESIVE TAPE**... in rolls 1/4" to 12" wide. With heat resistant adhesive backing, it is easily applied to all surfaces. Useful for many applications in your plant.

• **KORDA FLEX TEFLON COATED FIBERGLAS**... in rolls up to 38" wide; gauges .003" to .015". A perfect surface for heat sealing. Resists burning. Releases all plastic films. Reduces "Drag" of films on machine surfaces.

• **CEMENTABLE TEFLON**... pure Teflon, chemically treated on one side for quick adhesion with one of our Teflon cements. Untreated side presents an extremely slippery bearing surface.

We also make a full line of Teflon rod, sheet and molded products; Teflon Cements; Silicone Rubber; and other heat resistant materials for the industrial trades.

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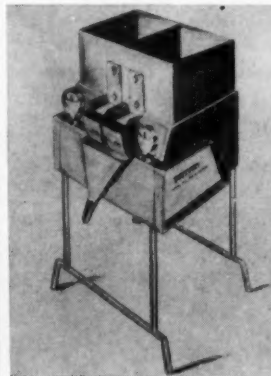


**CHICAGO GASKET
COMPANY**

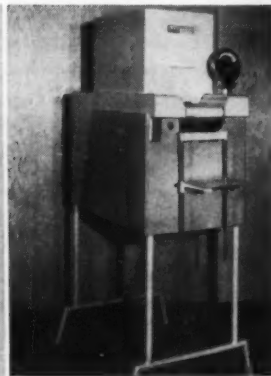
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TRESCOTT

TWO NEW WEIGHING MACHINES



Twin Scale
Model BB.
Vibratory Feed.
High Speed.
Net Weigher
Capacity 1/2 oz. to 5 lbs.
UP to 40—1/2 lb. weighings
per minute.



Single Scale
Model C.
Belt Feed
High Capacity
Net or Gross Weigher.
Capacity 8 oz. to 30 lbs.
UP to 10—20 lb. fillings per
minute.

See these new machines at the

PMMI Show, Booth 311

Or for full information write direct to:

THE TRESCOTT CO., Inc., Dept. MK, FAIRPORT, N. Y.

For your information

engineering is contained in "Techniques of Plant Maintenance & Engineering—1956," published by Clapp & Poliak, Inc. The book reports proceedings of the conference held with the recent Plant Maintenance & Engineering Show. Copies, priced at \$10 postpaid, may be obtained from Clapp & Poliak, Inc., 341 Madison Ave., New York 17.

A new book titled "Polyesters and Their Applications," by Bjorksten Research Laboratories, Inc. (Reinhold Publishing Corp., 430 Park Ave., New York 22; \$10) surveys the entire polyester field from raw materials to fabricated product. It covers most phases of the production and use of polyesters and enables quick location of patents or literature bearing on specific phases of the polyester field. Included are not only the unsaturated polyesters used in molding, casting, coating, impregnating and laminating, but also the saturated polyesters used in production of fibres, films, elastomers and foamed plastics. Periodic volumes of the book will be published when merited, to make a basic reference work covering the current status of the field and indicating the problems which must be overcome for further advancement and the direction of future trends.

A new edition of "Lettering and Alphabets" by J. Albert Cavanagh (Dover Publications, Inc., 920 Broadway, New York 10; \$1) is now available. This practical book on lettering is designed to show what is wanted today by progressive art directors. Its 128 pages present 76 complete alphabets, together with many additional specimens. Any of the hand-lettered alphabets in the book may be reproduced without cost or permission, according to the publisher.

Procedures for setting up a marketing program are set forth in a new 24-page booklet published by the Amos Tuck School of Business Administration. Written by Prof. Albert W. Frey, it is entitled "The Effective Marketing Mix: Programming for Optimum Results" and is one of a series published by the Amos Tuck School under a grant from the Alfred P. Sloan Foundation. Copies may be had on request to Dean Arthur R. Uppgren, The Amos Tuck School, Hanover, N. H.

This year's American Management Assn.'s Summer Program for Packaging Management consists of three clinics, held on the campus of Colgate University, Hamilton, N. Y. Subjects include "Organization and Management of the Packaging Function," "How to Establish a Program for the Control of Weight" and "Packaging of Consumer and Industrial Hard Goods."

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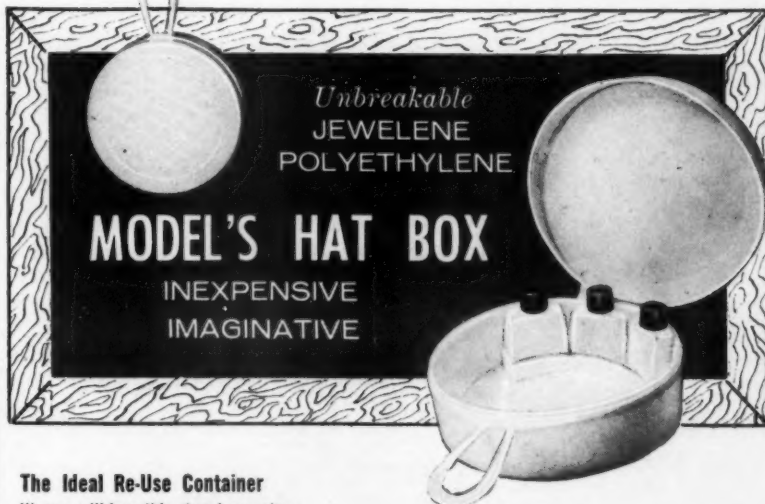
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U. S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps not accepted. Edited by H. A. Levey.

Flat-Top Container Fabricating Machine, C. Z. Monroe and J. F. Earp (to Ex-Cell-O Corp., Detroit, Mich.). U.S. 2,745,323, May 15. In a machine for making flat-topped cartons of paperboard or the like from bodies having top closure parts defined therein and selectively coated with thermoplastic adhesive, each said body having roof panels, top flange panels, an inner top flap having a filling and pouring opening therein and an outer top flap having a filling flap therein, the combination of a base, a body-forming unit mount on base and a conveyor adapted to receive pre-formed carton bodies in a procession from body-forming unit.

Packaging Machine, C. B. Harker (to Bartelt Engineering Co., Rockford, Ill.). U.S. 2,745,583, May 15. In a packaging machine having stations disposed successively along a predetermined path, the combination of, means for gripping and supporting a row of bags open end up in edge-to-edge but laterally spaced relation, each of said bags comprising front and back walls joined at their edges to points short of the top of the bag, to leave the upper ends of the walls free.

Partitioned Container, T. V. Lugt, Jr. (to Sutherland Paper Co., Kalamazoo, Mich.). U.S. 2,745,587, May 15. A partition unit comprising two complementary segmental sections formed of an integral blank and disposed side by side, each section when erected comprising a curved side wall of approximately 180 deg. in extent, a pair of first partition members and a pair of second partition members, the outer edges of the first partition members being hingedly connected to the opposed side edges of the side wall and having their inner edges hingedly connected to the inner edges of the second partition members.

Dispensing Container, R. M. Dunning (to Waldorf Paper Products Corp., St. Paul, Minn.). U.S. 2,745,588, May 15. A container including six panels arranged in series with end panels of the series connected together, two of adjoining panels being of substantially larger size than the intermediate panels therebetween, each of said larger panels being connected to a narrower panel which is parallel to the other of said larger panels and each of said narrower panels being foldably connected to a narrower panel parallel to the larger panel to which each respective first-named narrower panel is secured.

Carton, G. J. Daly and H. E. Lynch (to The Ottawa River Paper Co., Toledo, Ohio). U.S. 2,745,589, May 15. A substantially rectangular carton for apples and like commodities comprising a liner and a cover tray adapted to be packed in inverted position, tray having a top wall and side and end

panels, said liner having similar but slightly smaller side and end panels and an open top and bottom, the panels of the liner telescoping snugly within corresponding panels of the tray when the tray is inverted and the top of the liner is nested downwardly therein.

Easy-Opening Corrugated Paperboard Carton, C. O. Steck (to F. J. Kress Box Co., Pittsburgh, Pa.). U.S. 2,745,592, May 15. A corrugated paperboard carton having at its top inturned inner flaps covered by inturned outer flaps, outer flaps having inner longitudinal edges in close proximity to each other, the lower surface of an outer flap having a slit extending across its lengthwise near its inner edge to define a marginal strip extending the full length of flap and overlying inner flaps.

Bag, C. V. Brady (to Bemis Bro. Bag Co., St. Louis, Mo.). U.S. 2,745,593, May 15. A bag comprising a length of tubing having gusset sides and formed at one end with a bottom closure, bottom closure comprising means securing together portions of the tubing at one end thereof, bag being provided with a flexible handle member which is narrow relative to the width of the bag and which extends the full length of the tubing on the outside thereof in one of the gussets and which is caught at its lower end by means in the bottom closure.

Valve Bag, W. W. Hahn and R. H. Bradt (to Universal Paper Bag Co., New Hope, Pa.). U.S. 2,745,594, May 15. A valve bag comprising a multiply paper body having a longitudinal gusset and having a top corner folded in at the gusset to form a valve apron, valve apron having a free edge forming the inner end of the valve opening and a parallel fold line along which it is joined to gusset, apron also having a center fold line extending from the mid-point of free edge to the mid-point of parallel fold line and forming at free edge the apex of the valve.

Apparatus and Method for Making Folding Plastic Containers, S. Bright, Jr. (to Troth Bright Page, Inc., Paoli, Pa.). U.S. 2,746,360, May 22. A method of making a seamless plastic folding container blank from an extruded plastic tube comprising flattening tube to form folded side edges and cutting blank from flattened tube.

Method and Apparatus for Assembling Cartons, R. Vable (to Robert Gair Co., Inc., New York, N.Y.). U.S. 2,746,362, May 22. Given medially folded carton blanks having registering slots extending through the opposed walls thereof and arranged normal to the medial fold, notches along the medial base fold in alignment with slots, and given cross wall blanks having up-

wardly extending slots with locking tongues in their edges, that method of assembling the carton and cross wall blanks which comprises feeding the medially folded carton blanks singly and holding each in turn in its assembling position.

Dispenser Having a Tape-Severing Knife and Automatically Acting Tape Brake, C. P. Taylor (to Ideal Stencil Machine Co., Belleville, Ill.). U.S. 2,746,546, May 22. In a dispenser, a frame, a fixed horizontal platen on frame, a knife and brake support disposed over platen, means for pivotally connecting brake and knife support to frame.

Carrier Cartons, C. L. Champlin and G. H. Steele (to The Ohio Boxboard Co., Rittman, Ohio). U.S. 2,746,638, May 22. A carrier carton of paperboard material, including a body and a handle member, body having a bottom member and side and end-wall members upstanding from bottom member, end-wall members having normally juxtaposed inner and outer plies and side-wall members having end flaps interposed between and embraced in assembled relation by the inner and outer plies of end-wall members.

Carrier for Bottles and the Like, W. E. Turner and E. B. Whitehead (to Atlantic Carton Corp., Norwich, Conn.). U.S. 2,746,639, May 22. A collapsible bottle carrier formed from a pre-formed blank of sheet material comprising in combination, opposite vertically disposed elongated outer side walls, horizontal bottom wall sections connected at outer longitudinal edges to longitudinal lower edges of side walls and connected at inner longitudinal edges thereof to one another.

Container with Closure and Dispensing Valve, J. T. Eford and C. P. Mottram (to Bridgeport Brass Co., Bridgeport, Conn.). U.S. 2,746,647, May 22. A package including, in combination, a container having a recessed wall with a hole therethrough, an elastically deformable tubular plug pressed partly through hole and having mutually opposed flange surfaces respectively pressing against the inside and outside of wall and having a tapered inner shank and a cylindrical outer shank which respectively extend from flange surfaces in mutually opposite directions and with a bore closed by a transverse web.

Method of Making Plastic Folding Containers, S. Bright, Jr. (to Troth Bright Page, Inc., Paoli, Pa.). U.S. 2,747,472, May 29. A method of making a folding container blank comprising extruding a relatively stiff elastic tube from bulk plastic stock, flattening tube along fold lines to form oppositely posi-

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U.S. patents digest

tioned substantially flat walls, cutting the flattened tube into a plurality of blanks.

Feeding and Erecting Mechanism for Carton Blanks. C. Z. Monroe and D. W. German (to Ex-Cell-O Corp., Detroit, Mich.). U.S. 2,747,473, May 29. In a feeding and erecting mechanism for carton blanks, the combination of a feeder magazine for holding a stack of folded carton blanks, a peeler wheel disposed in proximity to the discharge end of magazine, one face of wheel overlying the exposed marginal edge portion of foremost blank in stack.

Labeling Machine. J. L. Golubski (to Oliver Machinery Co., Grand Rapids, Mich.). U.S. 2,747,757, May 29. In a labeling machine having means for moving packages in succession, one following another in a continuous, horizontal straight path of movement, and having additional means for depositing a label at upper side of each package.

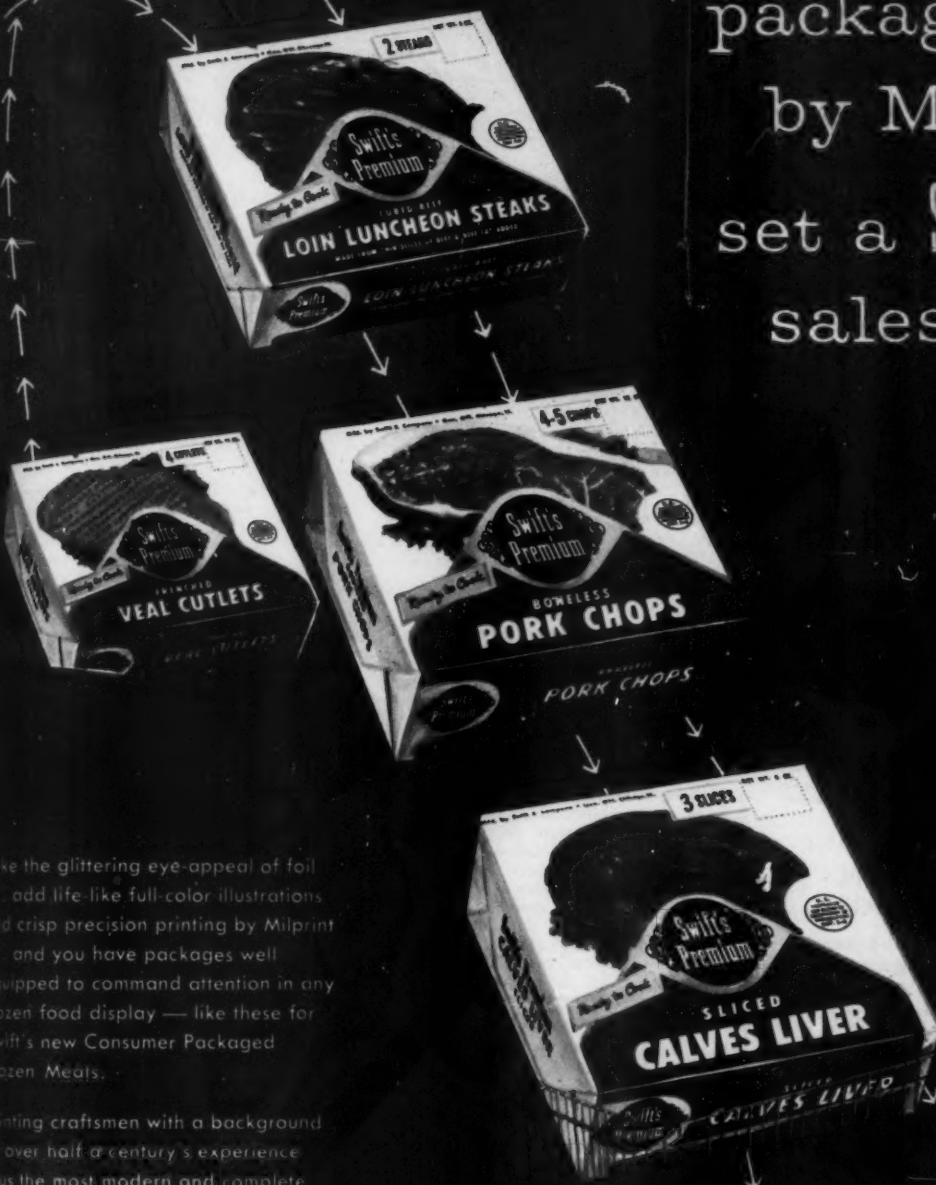
Containers. R. J. Gaudreau (to Standard Foil Products Corp., Springfield, Mass.) U.S. 2,747,784, May 29. A discardable container for foods comprising in combination, a receptacle formed from aluminum foil a few thousandths in thickness and a closure therefor, said receptacle including a horizontal bottom wall having a side diverging upwardly from bottom wall and terminating in a rim portion, rim portion curving upwardly and outwardly from upper edge of side wall, forming an annular ledge for a closure.

Cartons. R. E. Fink (to The New Haven Pulp & Board Co., New Haven, Conn.). U.S. 2,747,785, May 29. A carton blank which comprises four side-wall panels lying in a row and separated by crease lines, a pair of transversely slotted flaps attached to alternate panels at the bottom ends thereof, a pair of solid flaps attached to the intermediate panels at the bottom ends thereof, a pair of like partition panels connected to the free ends of respective solid flaps, each partition panel having a central longitudinal fold line extending inwardly from its free end and a pair of cuts extending laterally from the fold line to the opposite side edges of the panel in offset relation.

Collapsible Container. E. L. Arneson (to Morris Paper Mills, Chicago, Ill.). U.S. 2,747,786, May 29. A container formed from a single blank of cardboard material which is cut and scored to divide the same into a plurality of connected panels, which panels form when the container is erected, a bottom, side and end walls, and a cover.

Combined Packaging and Supporting Members. A. G. Davidson, Jr. (to the American Rondo Corp., Hamden, Conn.). U.S. 2,747,787, May 29. A rectangular blank having at least four parallel score lines defining at least five panels, three of which are adjacent, of substantially similar width and define two opposed and one intermediate panel, each of said opposed panels having se-

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U. S. patents digest

cured thereto a similar undulate strip forming similar article-receiving channels.

Liner for Composite Containers, T. W. Winstead (to Hedwin Corp., Baltimore, Md.). U.S. 2,748,673, June 5. The method of making a removable liner of flexible impervious synthetic polymer film for a composite shipping container, the steps comprising: uniformly expanding a tubular section of the film inwardly of one end thereof to effect uniform inturning of the unexpanded portion of adjacent section and form an inwardly directed endless flange.

Device for Setting Up Collapsible Cellular Cartons, H. E. Dailey (to Bloomer Bros. Co., Newark, N.Y.). U.S. 2,748,674, June 5. A device for setting up collapsible cellular cartons of the type having front, bottom and rear walls, a central longitudinal partition and two series of transverse partitions hingedly connected to the tops of said front and rear walls, and adapted to be swung in opposite directions, respectively, from horizontal to erected vertical position.

Envelope-Making Machine, H. F. Afelder (to The Wolf Envelope Co., Cleveland, Ohio). U.S. 2,748,675, June 5. In an envelope-making machine including means to form envelopes from blanks and move the formed envelopes substantially horizontally with their flaps in trailing relationship with respect to the bodies thereof and with the inner surfaces of flaps uppermost, the combination therewith of a top flap folding mechanism comprising means adapted to divert the body of an envelope downwardly relative to its top flap while so moving.

Box Head Labeler, M. W. Flynn (to Food Machinery & Chemical Corp., San Jose, Calif.). U.S. 2,748,971, June 5. In a box head labeling machine having means for conveying a box head along a predetermined path, means for supporting a supply of labels adjacent said path, means for flexing a portion of a label of said supply toward said path.

Bottle Carrier, R. J. Hennessey and R. M. Dunning (to Waldorf Paper Products Co., St. Paul, Minn.). U.S. 2,748,978, June 5. A bottle carrier with its top in closed condition including a carton having rectangularly arranged side walls and top and bottom closures, the top closure including a pair of closure flaps connected to two opposed side walls and folded inwardly in coplanar relation.

Truncated Conical Paper Cup, W. E. Amberg and S. W. Amberg (to Lily-Tulip Corp., a corporation of Delaware). U.S. 2,749,010, June 5. A truncated conical single-piece paper cup of less than 60 deg. cone angle comprising a substantially smooth frusto-conical side wall having a cone angle of less than 60 deg. and a substantially transverse spoon serviceable pleated bottom merging with the smaller diameter end of the side wall, said spoon serviceable

bottom having an outer annular portion, which merges with the side wall, provided with substantially radially disposed pleats and a central circular portion, which merges with the annular portion, provided with substantially circumferentially disposed pleats.

Ventilated Compartmented Box, I. L. Lebow (to National Container Corp., New York, N.Y.). U.S. 2,749,011, June 5. A ventilated partition for a box, partition comprising separated lateral wall portions, flaps along the upper edges of lateral wall portions bent toward one another substantially at right angles to lateral wall portions so as to form separating top wall between spaced lateral walls.

Internal Support for Packing Boxes, R. L. Wilkerson (to International Paper Co., New York, N.Y.). U.S. 2,749,013, June 5. A self-supporting packing box protective and supporting pad formed from a single blank of corrugated paperboard or the like, comprising a substantially rigid polygonal structure formed from a plurality of outside panel walls folded at the junctures with each other and connected at the ends.

Cellular Containers, H. R. Russel, T. G. Mairs and R. J. Hennessey (to Waldorf Paper Products Co., St. Paul, Minn.). U.S. 2,749,014, June 5. A cellular container including a body portion including a bottom panel, side and end-wall panels foldably connected to bottom panel and lining panels hingedly connected to two opposed wall panels provided with partition strip slots and foldable to lie inwardly of their respective panels.

Folding Cartons, L. C. Pennebaker (to Container Corp. of America). U.S. 2,749,015, June 5. A folding carton comprising a body portion and a cover portion, body portion including a bottom, side walls hingedly connected to opposite margins of bottom, a front wall and a rear wall hingedly connected to opposite margins of bottom, means hingedly joining front and side walls, reinforcing strips hingedly connected to side walls along the rear edges thereof and a bracing strip hingedly connected to the upper edge of each side wall.

Bread Tray Carton and the Like, W. Ohlund (to Robert Gair Co., Inc., New York, N.Y.). U.S. 2,749,019, June 5. A paperboard box having two pairs of opposed wall panels and a closure panel at an end of the box, closure panel extending from one of said wall panels and adjoining the latter along a transverse fold line.

Bag, T. R. Baxter (to Continental Can Co., Inc., New York, N.Y.). U.S. 2,749,020, June 5. A bag formed of relatively flexible sheet material having heat-sealing characteristics which comprises a tubular body portion and a double-seam end closure consisting of a ribbon-like transversely extending flat seam and an adjoining bead seam formation extending along the marginal edge only of the flat seam.

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Toward automation

[Continued from page 117]

low profits and the high cost of development. A 1955 survey of members of the Packaging Machinery Mfrs. Institute disclosed that, on the average, 7 cents of each sales dollar was going to research and development, and less than 5 cents to net profit.

In the early days, they point out, a piece of packaging machinery was usually a custom-built job and it was simple enough for the manufacturer to cover the development cost in the selling price.

Today, few machines are custom built for a single customer; they are developed and built for a broad market and usually a highly competitive market.

The manufacturers of packaging machinery are usually small and their customers large, and it becomes increasingly difficult, they say, to sell at a price which will cover the costs of development and engineering expenditures.

Yet it is obvious to all that further progress in packaging automation will come only in proportion to the amount of money poured back into research and development.

American machinery manufacturers today must buck stiff competition from abroad. Machines of German manufacture, particularly, are becoming increasingly conspicuous on the American scene; they are generally well engineered and excellently built—at wage scales far below the American rate.

The rapid pace of new product development in today's booming economy also puts a strain on the packaging-machinery builders. With new-product discoveries pouring out of the drug industry, for example, at an amazing rate, success in that industry often depends upon getting to market a step ahead of a competitor—and that often depends upon getting rapid delivery of a new packaging machine. The short-delivery pressure being put on suppliers has never been greater.

But, by and large, these are the strains and pressures of a healthy, expanding, changing economy, and no industry with the history of inventiveness and resourcefulness that the packaging-machinery industry has is likely to be licked by problems such as these.

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Package

Sampler
Package

Bulk Packing

PA 11

A new HEAT SEAL SENSATION for "SKIN" and "BLISTER" packages



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DESCRIBING PLASTIC BLISTER HEAT SEAL

*T.M. Reg. U.S. Pat. Off.

Pyroxylin
PRODUCTS, INC., CHICAGO 32

Moisture control

[Continued from page 184]

in laminated liner F. On the other hand, the sugar in cartons with other laminated liners, such as E, was still in good condition.

At the end of 94 days, the sugar in Carton I was still in excellent shape, but cartons E, G and H were beginning to show some sign of setting up.

The moisture loss from the carton with the laminated liner F started off at a rate comparable to the loss with the single sheets, but, after about 40 days, leveled off so that it ended up close to the loss with the other laminated sheets. Examinations of some of these cartons at 40 days showed a definite cake beginning to form. Examination of the sugar in Carton A at the end of 30 days, where its moisture loss leveled off, also revealed an incipient cake formation. It is thus apparent that the rate of drying may be more important in the caking of brown sugar than is the ultimate total moisture loss. Once the caking starts, it becomes more difficult for the moisture still left in the sugar to diffuse through the mass, and so the moisture loss from the carton slows down. At this point, the sugar near the liner is undoubtedly drier than that in the center of the box. If the carton is opened carefully, the sugar can be removed as a single block which is easily broken. This is the start of the hard cake. The block probably continues to harden due to a transfer of moisture from the sugar in the center to that at the walls, with a constantly diminishing loss from the carton itself.

Effect of creasing

Water-vapor transmission data had been supplied for the various papers by the respective manufacturers. This included both flat and creased data. The data for the flat were relatively close for both single waxed sheets and laminated sheets, but on the crease the WVT of the laminated sheets was much lower than that of the single sheets. This, together with the fact that the dry-room test showed that the laminated liners generally gave slower moisture loss, suggested that moisture was lost from the carton primarily through creases in the liner.

To check this, a number of car-

tons were made with hand-formed liners, using the single sheet liner, D. One set was made in the same way as the machine-made liner. In the second set, an extra crease was formed lengthwise on each of the four sides, while the third set had two extra creases in each side. Sets 2 and 3 had approximately 50 and 100% greater length of crease than had Set 1. The three sets of cartons were then filled with brown sugar, carefully hand sealed and placed in the dry room. Their moisture loss (over a period of 40 days) is shown in Table III and Fig. 5.

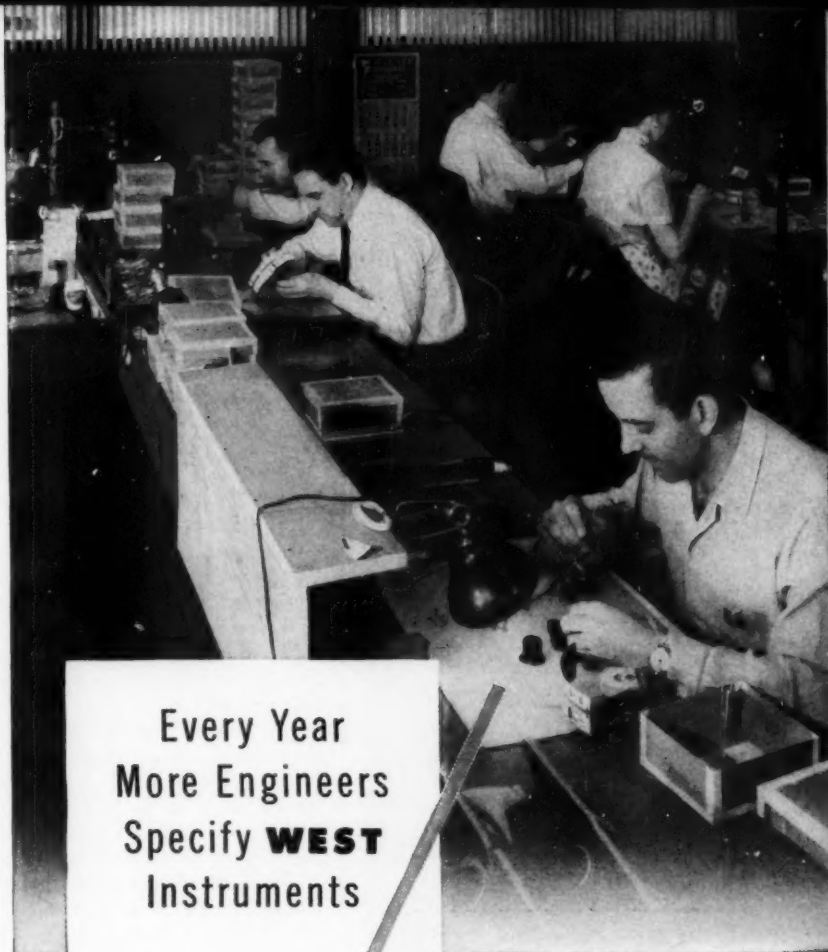
Since the rate of moisture loss increases with the length of crease in the liner, it confirmed the importance of the crease in protection of the sugar. Because of the superior protection (on the crease) that the laminated sheets afforded, future considerations were limited to this type of liner.

While the above tests were taking place, a number of additional stub rolls of laminated papers were obtained from manufacturers. In a series of comparative tests, they were gradually eliminated until one was selected as being the best from both a protective and cost standpoint. With respect to the cost of the liner, it is, of course, necessary to consider the yield and therefore the cost per unit package, rather than the cost per weight of paper. In this respect the laminated sheets have a definite disadvantage, but it was felt that this was more than offset by their superior protective quality.

Effect of laminant

While investigating the various laminated liners, it was observed that the degree of protection appeared to depend more upon the type of laminant than on the basic paper used to make the sheet. Laminated sheets made with sulfite, glassine supercalendered sulfite and sulfate paper were among those tested, but there was no correlation between them and the relative moisture loss.

Within the limits of our testing facilities, however, a correlation did appear to exist with the type of laminating wax. It was evident that, at least for the liners tested, the tackier the wax, the better the protection. Unfortunately, only qualitative observations could be made, since we had no measurement of the



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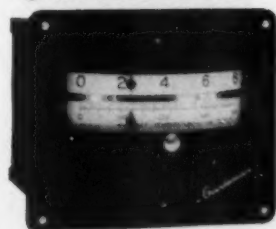
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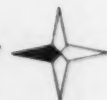
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degree of tackiness. Whether the tackiness, per se, contributed to the protection or was simply the result of a superior formulation, it is difficult to say. Wax-paper manufacturers do not like to disclose their formulations, but several of them implied that the tackiness was due to the use of microcrystalline wax either alone or in combination with other materials. On the other hand, the softer laminants make for greater flexibility and less pinhole formation when the liner is creased. Furthermore, it is possible that, if a pinhole does develop in the liner, the flexible wax may flow so as to reseal the hole.

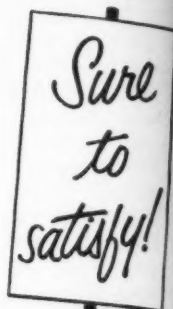
One disadvantage of a laminated liner is the necessity of glue sealing the seams and bottom fold. Since the wax was sandwiched between two light sheets, only unwaxed surfaces were in contact at the seams and, of course, these could not be heat sealed. Although the package-making machines were equipped for the application of glue, its use decreased the efficiency of the operation. It was therefore suggested that the laminated sheet be coated with a layer of hard wax, which would permit it to be heat sealed in the same manner as a single waxed sheet. It was realized that this would increase the cost of the liner per package, but this might be made up by the increased efficiency and saving in glue. It was also thought that the extra wax coating would contribute additional protection to the sugar.

At our request, several rolls of the selected laminated liner were overwaxed with 7 lbs. of hard paraffin-based wax by the manufacturer. This paper was then compared directly with the unwaxed laminated liner.

The weight-loss curves for these papers are shown as Test A in Fig. 6. It was surprising to find that the overwaxed, heat-sealed liners showed a slightly greater weight loss than did the unwaxed glued paper. Examination of the packages following the run showed no defects in the seals or liners. A second test of the two papers was carried out with similar results, as shown by Test B, Fig. 6. No explanation of this effect is offered except to suggest that possibly the application of heat when the seam is sealed causes the soft laminant wax to penetrate the paper and so weaken the moisture barrier. Additional investiga-

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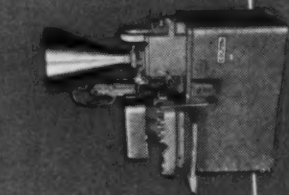
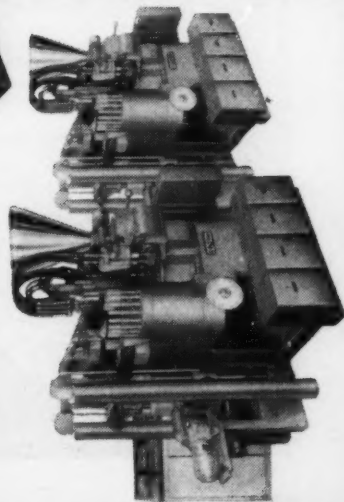
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Exposition

Cleveland, Sept. 11-14

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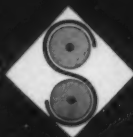
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tion would be necessary to establish this point.

Results of the above tests are tabulated in Table IV.

Even though a reason for the effect is not evident, the fact that the overwaxed liner was not better than the plain laminated liner serves to confirm the theory that the weak spot in the moisture barrier is the crease. If this were not so, the extra wax on the flat surfaces should certainly result in less moisture loss from the carton. On the other hand, since the moisture barrier of the paraffin overwax is broken at the crease, it affords no extra protection at this, the most important point.

In spite of the failure of the overwaxing to give additional protection, the savings from the ability to heat seal rather than glue warranted the use of this paper. After some minor modifications and additional tests, the final sheet selected consisted of two 20-lb. supercalendered sheets, laminated with 7 lbs. of tacky laminant based on amorphous microcrystalline wax and overwaxed with 7 lbs. of a hard paraffin-based wax. The paper had a finished weight of 54 lbs.

Discussion

Although the importance of the soft wax laminant in improving the moisture barrier, particularly at the creases, has been demonstrated, the principal object of this paper is to illustrate how a packager with limited test equipment can improve his package.

Even though a particular paper was selected as a result of this work, the author does not wish to imply that this would always be the best paper, even for very similar purposes. Each packaging situation is a separate problem and all factors must be considered.

For example, it was felt that the paper selected for the brown-sugar package would not be as satisfactory for powdered sugar as would one of the better single waxed sheets. Powdered sugar does not require as much protection as does brown, and to use the more expensive liner would be overpackaging and unnecessary.

Similarly, the use of the foil-laminated liner, which gave such excellent results, would be overpackaging for brown sugar. With such a liner, the sugar would undoubtedly

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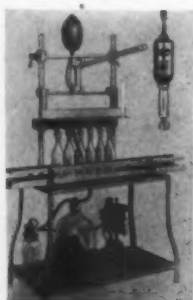
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remain uncaked for several months. Storage of relatively moist brown sugar for such a long period might, however, create another problem in that there would be the possibility of the sugar "souring." This would probably make a worse impression on a customer than finding it caked.

For such reasons as these, over-packaging can often be as great a mistake as underpackaging. Actually, in the course of this work, several papers were found which were as satisfactory as, or, from a protection standpoint, even better than, the one selected. However, due to the location of their mills relative to our refinery, the freight put them at a disadvantage.

In the course of this work, the author and his associates were very much impressed by the wholehearted cooperation of almost every waxed paper manufacturer that was approached. They willingly supplied test rolls, not only of their regular stock papers, but also of special papers which they had prepared specifically for this work either on their

own initiative or at our suggestion. For this cooperation, the author is deeply indebted.

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Vacuum in a die-cut window folder

[Continued from page 166]

next phase of the packaging operation, which consists of folding the die-cut paperboard folders around the sealed bags.

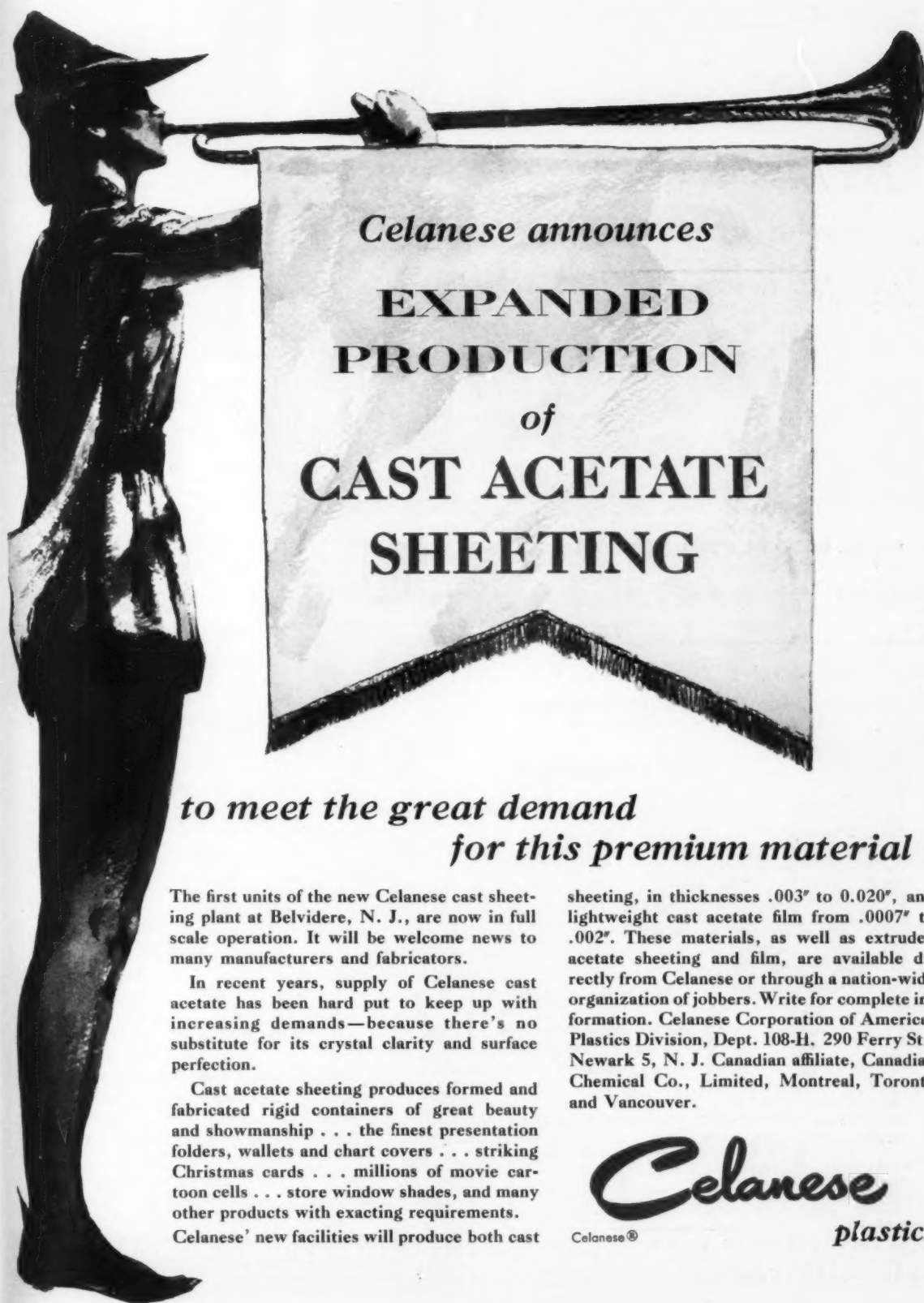
Printed in two colors, by letterpress, on 12-point solid bleached board, the folders have a heat-sealing type of coating on the unprinted side so that they may be securely sealed to the vacuumized pouches.

In applying the one-piece folders to the bags, the operator utilizes two types of wooden mandrels—one for round slices and the other for square—to position the pouches accurately in the die-cut openings. Once the bag has been positioned, the scored left margin of the card is tucked back between the pouch and the back surface of the folder, firmly locking the bag in position. The pressure-sensitive Scott Petersen label, fed from a foot-controlled label dispenser, is manually applied to the pouch at this point.

In the final stage of the packaging operation, the consumer packs are then placed in position at the infeed end of a thermostatically controlled heat-sealing machine which conveys them through heated channels ex-

tending along each side. As the packs move through this compact unit, the printed folders are heat sealed permanently along three edges, locking the top and bottom edges of the 3-mil transparent pouches between the two paperboard surfaces. Simultaneously, the back of the pouch is sealed to the inside surface of the folder, producing an even more secure package. A coding attachment also code dates each package.

Upon emerging from the sealing operation, the finished packages are packed, in upright position, in corrugated shipping containers holding two dozen units each, or 9 lbs. of product. Also placed in each carton is a printed slip pointing out that the package contains vacuum-packed products and warning store personnel: "Please handle carefully. Don't break vacuum seal." Reinforcing this precautionary note is a cartoon-type illustration showing a vacuum-style sliced luncheon meat package about to be punctured by the sharp prongs of a metal price tag such as those which are customarily used on fresh meat cuts.



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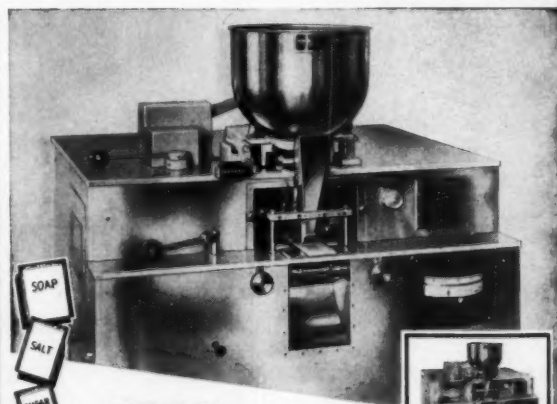
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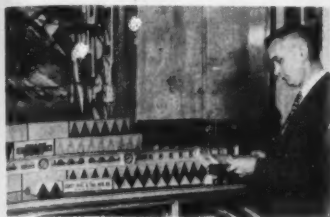
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Made from kraft board, the cartons are designed both to catch customers' eyes in retail hardware stores and to establish a family identity for the company's line.

Credit: Cartons by Hinde & Dauch, Sandusky, Ohio.

Institutional foods

[Continued from page 133]

a year, helping to build the restaurant business.

The National Restaurant Assn. reports that about 15 of the big food firms have promised to feature blurbs about the virtues of dining out in their consumer advertising programs.

Standard Brands has already run a national ad picturing a family group around a restaurant table, with a caption slanted to husbands: "She deserves to eat out at least once a week."

General Foods is now plugging "the greatest guy in the world—the man who takes his family out to dine" in ads and with a promotional kit supplied to about 20,000 restaurants, containing newspaper ad mats, radio scripts, matchbook covers and handbills.

The Kellogg Co. this summer is featuring "eating breakfast out" in ads depicting its single-serving cartons of cereals.

All indications are that the big food companies, which once regarded restaurants and other eating places as a relatively unimportant consideration in packaging, are going all out to sell the same kind of convenience packaged and pre-processed foods to the eatery operator that they have been selling to the housewife via food stores for years.



MORE THINGS "STAY PUT" IN NEW SQUEEZE BOTTLES BY PLAX

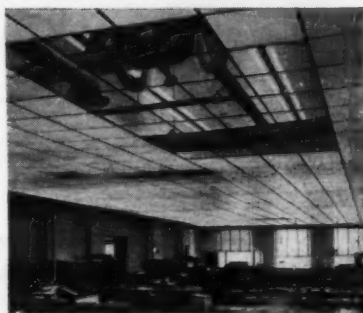
New linings developed by Plax stop seepage of oils and aromas from polyethylene bottles — assure practical shelf-life for host of new uses. Among products that can now be packaged in handy, colorful Plax squeeze bottles are: sun-tan oils, baby oils, hair tonics, mineral oils, complexion lotions, lubricants, eucalyptol-base pharmaceuticals.



Tough, non-toxic Polyflex® transparent lids protect contents and tempt appetites.



NEW ZIP FOR LILT
Now Lilt Home Permanent has Plax squeeze bottle that makes application of lotion and neutralizer quicker and neater.



U. L. accepted Plax lighting panels hide piping, electrical wiring, sprinklers, ducts.

These are just a few of the new things in plastics being created by Plax research. More are in the works. Maybe we have the sales-building, profit-making idea you're seeking for your business. Why not contact us and see.

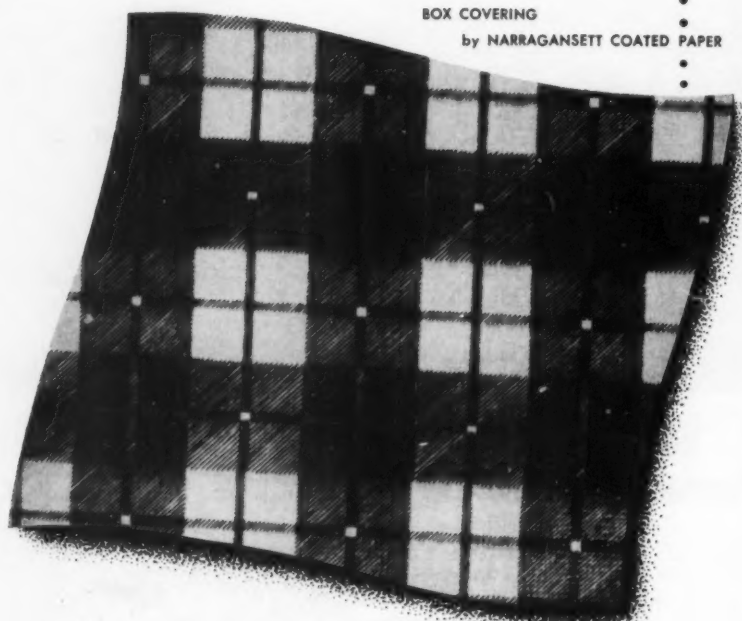
Leaders in Making Plastics More Useful

PLAX

PLAX CORPORATION
P. O. BOX 1019 • HARTFORD, CONNECTICUT
In Canada: Plax Canada, Ltd., Montreal & Toronto

PACKAGING PRINT OF THE MONTH

BOX COVERING
by NARRAGANSETT COATED PAPER



THIS attractive box covering was printed on cylinders engraved by the Chambers-Storck Co.

It's typical of the quality packaging materials . . . in paper, plastics and foil . . . produced by concerns that rely on Chambers-Storck for fidelity of detail, long-run durability, delivery-as-promised, complete confidence on design.

For prompt, reliable attention to your needs in engraved rolls — for printing any packaging materials — one color or four color rolls in any size, contact Chambers-Storck, quality photoengravers since 1933.

Write for free illustrated brochure "Serving the Gravure Printing Industry" which describes Chambers-Storck facilities.



*Quality
Gravure Cylinders*

NORWICH • CONNECTICUT

Grass to Greece

As part of a special project sponsored by the Rotary Club of Oregon City, Ore., bags of special alta fescue



seed grass are being shipped to farmers in Greece. Purpose of the shipment is to help Greek farmers learn the value of planting forage grass and, at the same time, extend foreign markets for the Oregon seed. The seed is packed in 5-lb. cotton bags, each holding enough to plant about one-fourth acre.

Credit: Bags by Chase Bag Co., 309 W. Jackson Blvd., Chicago 6.

Unit-cost laminations

A new system of unit-cost pricing, said to be unique in the flexible packaging industry, has been announced by Shellmar-Betner Flexible Packaging Div., Continental Can Co., Mt. Vernon, Ohio.

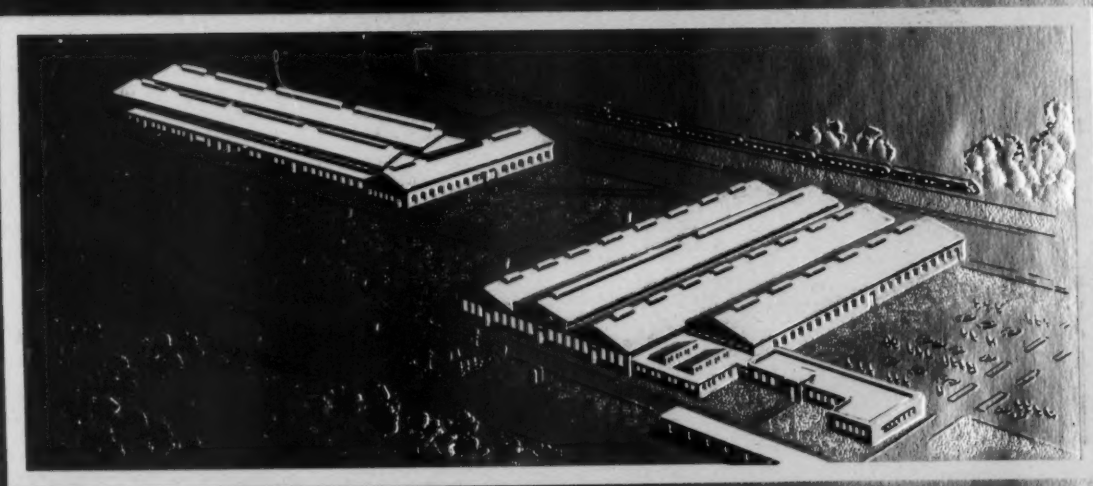
Now, says the company, a user can determine the exact cost per package involved in a purchase of laminated materials prior to ordering.

Under the old method, pricing was on a per-pound basis; now the price is per thousand square feet or per thousand packages. There is no problem of allowing for a variation of up to 10% in the yield per pound and the buyer can determine his exact changes in packaging costs due to variations in specifications.

The new pricing system will apply to both printed and unprinted stock.

CORRECTION: Central Waxed Paper Co., 5100 W. Roosevelt Rd., Chicago, should have been credited for the printing of the aluminum foil overwraps described in "Cracker Jack in Foil," MODERN PACKAGING, May, 1956, p. 119.

Continually Growing Foil Industry ...



Plant No. 1 Completed 1950

Plant No. 2 Completed 1955

ALUMINUM FOILS, INC.

JACKSON, TENNESSEE

NEW YORK 17, NEW YORK 175 EAST 44th ST.

CLEVELAND 15, OHIO 1842 LUCID AVE.

CHICAGO 2, ILLINOIS 69 W. WASHINGTON STREET

LOS ANGELES 32, CALIFORNIA P.O. BOX 325 VAN HARBUR, CALIFORNIA





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Aerosol production

United States and Canadian aerosol producers turned out 240 million units of self-spraying products with a retail value of about \$250 million last year, according to a report by the Chemical Specialties Mfrs. Assn. This sets a new record for the nine-year-old industry, with an increase of about 30% in production units and 32% in retail value over 1954.

Insecticides retained a slim lead for top position among more than 100 non-food products now available in pressurized packages, accounting for nearly 56 million units, or 23.3% of the industry's over-all 1955 production. Hair-net sprays accounted for 53.7 million units.

Other leading product types in 1955, based on CSMA's fifth annual survey of the aerosol industry, were: shave lather, 45.4 million units, up 7.3% over 1954; room deodorants, 32.1 million units, up 86.7%; miscellaneous personal products, including shampoos, perfumes, colognes, personal deodorants, suntan oils and hand lotions, 14.2 million units; pigmented and metallic paints, 7.7 million; artificial snow, 6.8 million.

Of the 240 million units turned out in 1955, about 10.4 million units were packaged in glass containers and the remainder in metal, according to the CSMA survey. Metal containers of 12-oz. or greater capacity accounted for 119.7 million units, while those of 6-oz. and smaller capacities totaled 105 million units.

Separate reports of aerosol container and valve production showed metal-can production for aerosols was slightly more than 257 million units, while valve production approximated 245 million.

Subcommittees named

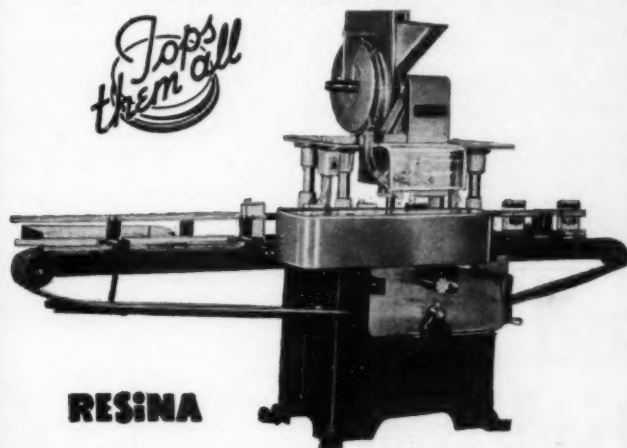
The recently formed Inter-Industry Food Packaging Committee has appointed two subcommittees to study and make recommendations on voluntary package simplifications and standardization. Ralph Johnson, National-American Wholesale Grocers Assn., will head a subcommittee studying master carton improvements and Don Parsons, Super Market Institute, will be chairman of a subcommittee to study retail shelf packs. Next meeting of the full committee is scheduled for Oct. 9 in Chicago.

RESINA

CAPPERS

a model for every purpose... a speed for every need!

NEW! INNERSEALER



Automatic innerseal machine for selecting and applying standard innerseals to various types and sizes of tin cans as commonly used in the oil industry.

**Capacity: 60-120 per minute.
Seals from 7/8" to 1 1/2".**

AND SPECIAL MACHINERY

Agents in principal cities throughout the United States and Canada.

Write for descriptive literature

RESINA
AUTOMATIC MACHINERY CO., INC.
Brooklyn 31, New York

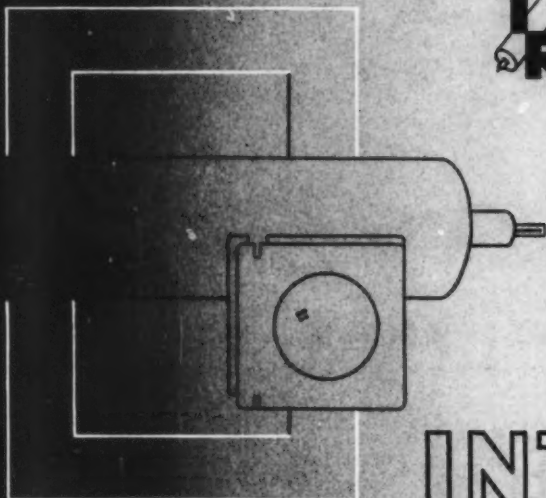
Visit our Booth No. 721 at the PMMI Show Cleveland, Ohio—Sept. 11-14.

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ENGRAVING CORP.

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End Sticking Problems!

TEMP-R-TAPE, Teflon tape with an adhesive backing, applies in seconds . . . provides the non-stick surface of Teflon . . . ends sticking problems, controls undesirable build-up and accumulations. Temperature range — 100° to 400° F. Non-contaminating, odorless. Used on heat sealing bars, flat plates, gussets, fins, forming dies, guide rails, hoppers, chutes, labeling rollers. Many packaging machinery and film manufacturers now recommend TEMP-R-TAPE. Eliminates spray coating and mechanical application of Teflon . . . saves down-time, replaces quickly.

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SPRuce 7-3631

Please rush me a free sample of TEMP-R-TAPE

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KENSOL Marking Equipment



Roll Leaf
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Specialty Ink
Printing Presses

Kensol 35T-20

Power Press with Turntable

- Single and Multi Color Roll Leaf Stamping and Ink Printing Equipment.
- Fine, Uniform Quality Marking on Plastic Cosmetic and Food Containers, Fancy Boxes of All Materials, Jewelry Box Satins, etc.
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124-132 WHITE STREET • NEW YORK 13, N. Y.

Specialists in Quality Marking Equipment and Supplies

don't let your
sales
manager
be a



"PACKAGING ORPHAN"

In your company he may be called the Sales Manager . . . or the Merchandise Manager . . . or the Distribution Manager; the title isn't important. The chap we're talking about is the one whose interest in the packaging function sometimes may be considered secondary, while the successful completion of his duties depends in a significant measure on the appearance of your company's packages and the protection they give to your products.

If this man, whatever his title may be, doesn't get his own personal copy of *Modern Packaging* every month to keep him up-to-date, you've a "packaging orphan" on your hands. While he should be, he probably isn't up on all the latest techniques of package merchandising, on how to package to obtain sales in multiple units, on what's "hot" in protective and decorative packaging. . . .

Modern Packaging isn't a cure-all for this man, but it will keep him posted on the important packaging developments he ought to know about. A twelve month subscription for him costs only \$7.00 in the United States and Canada, \$10.00 in Pan America, \$20.00 elsewhere. Write today; we'll enter his subscription immediately and bill your company later.

SUBSCRIPTION DEPARTMENT

MODERN PACKAGING

575 Madison Avenue
New York 22, N. Y.

Heat-sealable polyester

E. I. du Pont de Nemours & Co. has announced the installation of facilities for producing coated "Mylar" polyester film at its Circleville, Ohio, plant.

Among advantages that are to be gained from coating the film is to make it heat sealable on standard packaging machinery. Coated polyester is also said to have improved impermeability to moisture. At present, the uncoated film can be sealed only by adhesives or by using heat with benzyl alcohol. Construction of the new facilities is slated to begin in September, with coating equipment expected to be operating in the late summer of 1957. Until then, coated film will be available only in experimental quantities.

Printing by transfer

[Continued from page 141]

will undoubtedly prove to be even more interesting.

In addition to plain cellophane, for example, it would easily be possible to use the system for marking pre-printed cellophane wraps with special copy, such as size and color information. Of course, it has always been possible to imprint textual matter by conventional type—but not a complete label, in colors, as the new process permits. A typical use of this kind might be for hosiery or textiles, which could be packaged in a standard printed cellophane envelope, upon which special copy would be imprinted.

That's only the beginning. Dennison is now testing its new technique on other films—polyethylene, Pliofilm, polyester—and believes it to be easily adaptable to these materials. From these, it appears to be only a few more steps before using the method to apply special label or copy information, in full color, to paperboard cartons, to molded plastic containers, to metal foil, to fabrics, or even to metal cans.

Anyone who sells a package with a label on it is a potential user, the developers of the new process feel. For it makes it possible for colorful, permanent impressions to be applied at high speeds in a single operation. And, as far as price is concerned, Dennison says that its new "labels" are in the same price range as conventional heat-sealed labels.

BANK

Yes, you can bank on Chippewa's prompt service on all types of corrugated specialties.

If you can't trust the service you've been getting . . . if you're losing interest in your present supplier . . . check with Chippewa! You'll be money ahead.

The Chippewa Line

- Chippaflex flexible corrugated
- Single & double-face corrugated
- Corrugated sleeves and tubes
- Grade "A" corrugated
- Built-up corrugated pads
- French wrap
- Glassines and greaseproofs
- All-corrugated Chippasac
- Chippamat
- White cake circles
- Pizza boxes
- Chippamailer
- Turkey boxes
- Wardrobes and containers for moving-storage trade
- Chippaprint Service

Chippewa
PAPER PRODUCTS CO., INC.
2425 S. Rockwell St., Chicago 8, Ill.
Bartons Plant, South Hackensack, New Jersey



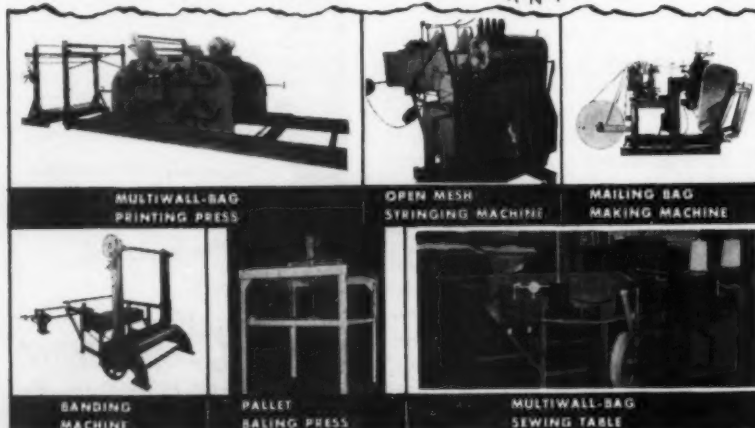
10 p.m.: plant closed... minds open!

After hours at West Engineering is a time for thinking... planning... projecting more profitable productions for our customers. Some call it imagining; some, creative engineering. Whatever you call it, West does it! And the midnight oil that burns here also "lubricates" the production line wheels in converting plants all over the nation... cutting costs... upping profits.

For 37 years West has been designing and building special machinery to solve your problems. Why not tell us yours! We have a plane at your service for factory visits and consultations. If the machinery shown below (or anything similar to it) fits into your plan, then write, wire or call... today!



Dept. M., Vawter Ave. on C & O Ry.
Richmond, Virginia — Phone 7-3057



Flexible figures

Shipments of converted flexible packaging products during April, 1956, were 10% greater than those during the same month last year, according to the latest report of the Bureau of the Census. Value of manufacturers' market shipments added up to a total of \$31.7 million.

These figures are based on reports submitted by producers as part of a continuing survey to which the National Flexible Packaging Assn. has contributed financial assistance.

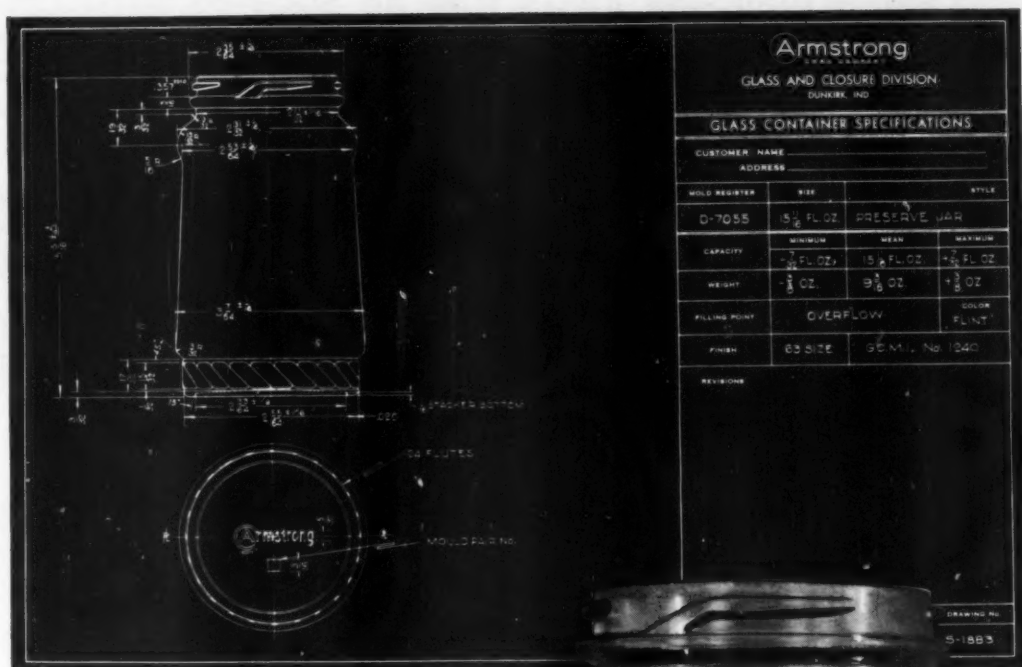
Broken down by types of flexible packaging, monthly shipments were:

(in thousands of dollars)	
Bags, pouches, envelopes, etc., printed or unprinted	\$15,642
Cellophane	\$3,018
Polyethylene, plain	4,150
Polyethylene in combination with paper, foil, film	954
Kraft or sulfite paper, plain & in combination	5,108
Glassine, grease-proof, parchment, waxed paper	2,412
Printed rolls and sheets except laminated or coated	8,128
Cellophane	5,660
Paper, all types	2,119
All other materials	349
Laminated or coated rolls and sheets, plain or printed	6,035
Commercial packaging, total	\$29,805
Resale household bags	738
Military specifications	1,162
TOTAL SHIPMENTS	\$31,705

Carton contest winners

Nineteen students in colleges in the Southwest were recently awarded cash prizes in the Folding Carton Design Contest sponsored by Pollock Paper Corp. The contest was held to stimulate creative interest among college art students in designing cartons and packaging. Grand Award of \$250 went to Tommy W. Rowell of the University of Texas. Fifty-eight entries were received from students of Southern Methodist University, Texas Tech, Texas State College for Women, the University of Texas and the University of Oklahoma.

Design makes jar a table favorite



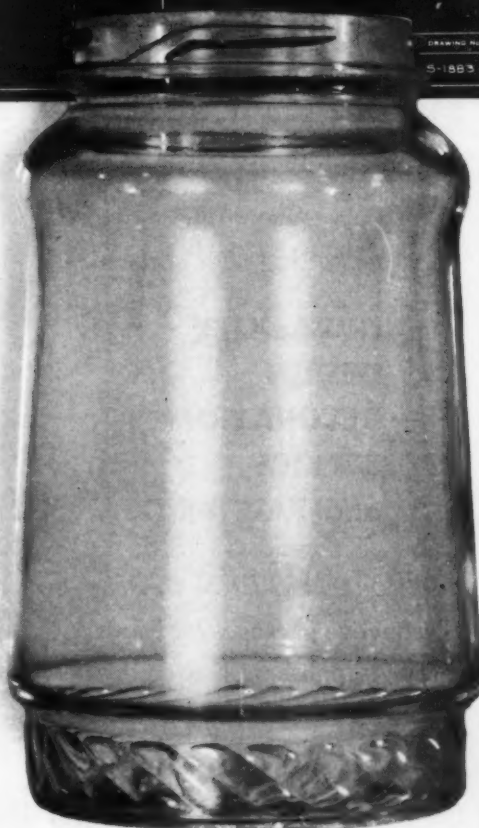
1. Jar shape keeps spoon handle clean
2. Indented sides provide better grip
3. Stacker bottom ideal for display

This new table server jar is making a hit with housewives. They like the way its shape lets them remove the preserves without getting the spoon handle messy. They also like the indented sides that give a better grip, and the spiral fluting around the base that makes the jar look so well in the table setting.

Grocers find it easier to stack because of the indented sides and stacker bottom.

All these points help this jar find its way from the shelf to the table. Let the design know-how that created this jar work for you in designing your new package. Talk it over with your Armstrong man or write Armstrong Cork Company, Glass and Closure Div., 5408 Crystal St., Lancaster, Pa.

Watch Armstrong Circle Theatre every other Tuesday evening on NBC-TV



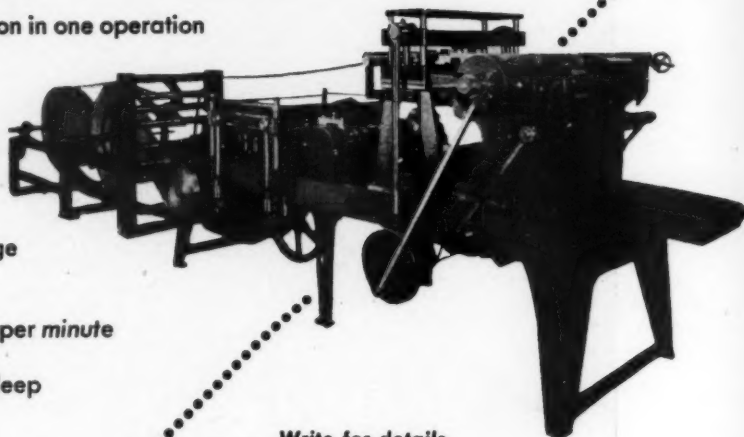
Armstrong GLASS CONTAINERS

glass that performs . . . packages that sell

Eliminate costly hand-made partitions

Your production costs can be slashed with the Inman automatic adjustable partition machine

- From roll stock to finished partition in one operation
- Only one operator required
- Clean cut, accurate and uniformly made partitions
- Machine fully equipped and easily adjustable for a wide range of sizes
- Production of 100 or more tucks per minute
- Will handle partitions up to 7" deep
- Production proven



Write for details

INMAN Manufacturing Co., Inc. AMSTERDAM, N.Y.

For packaging that combines

**DURABILITY
DESIGN
DECORATION
SERVICE
and FAIR PRICE**

Call on EASTERN CAN

Distinctive packages for waxes, cleaners, polishers, and other special-shape products.

EASTERN CAN COMPANY, INC.

649 Kent Avenue
Brooklyn 11, New York
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Full details available on request.

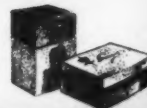
"Information, please . . ."

We're interested in
buying Colored Flock.
Who do you recommend
as our best source?"

"CLAREMONT"

Sonnyboy's answer is
as Bright as our Product!

We at CLAREMONT will be glad to supply
packaging-paper converters and bulk Flock
users with our newest color cards and latest
complete information. Write today!



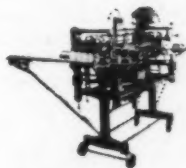
CLAREMONT WASTE MANUFACTURING COMPANY
The Country's Largest Manufacturer of FLOCK
CLAREMONT, NEW HAMPSHIRE

See us in Cleveland...



THE PACKAGING MACHINERY & MATERIALS EXPOSITION of 1956

September 11 thru 14
Cleveland Public Auditorium - Cleveland, Ohio



**LABELING
MACHINES**



**CASING
MACHINES**



**FEED
TABLES**

See in operation—
complete CRCO New Way
container handling line,
highlighting the most
versatile labeling machine
available with Continuous
label feed—quick change
for right or left hand lap
labels—booster feed elevator
—for cans, glass or
aerosol containers.

Write for catalogue
PP-1589

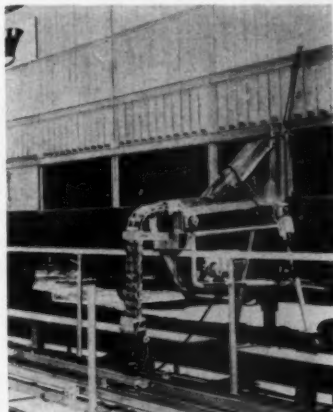


Chisholm-Ryder
A DIVISION OF PENNSYLVANIA
HANOVER, PENNSYLVANIA

Fast can unloading

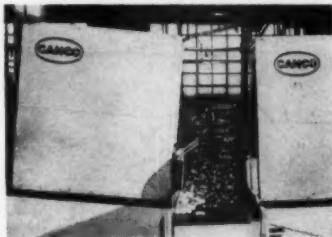
Two new methods of high-speed unloading of metal cans have been unveiled in recent weeks, as filling lines for popular canned foods head toward faster and faster speeds.

The first, used by Minute Maid Corp., Leesburg, Fla., is designed

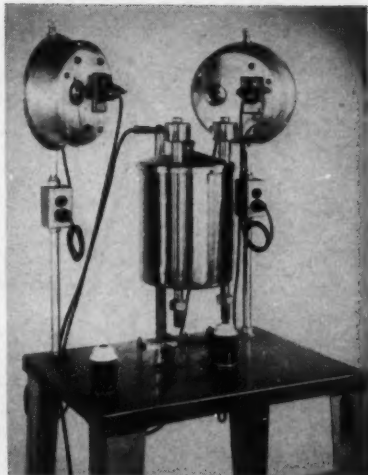


to unload 1,200 ready-to-fill 6-oz. cans for frozen citrus concentrates per minute. The system, shown above, utilizes a conventional flat-bed highway trailer in which cans are transported in eight large, specially built containers. Each of these has a special wheeled boot device which enables the load to be transferred directly onto the filling line via a cableway extension. Each large container is fitted with 11 vertical cells, which are made with pitched bottoms so that the load will be self-discharging by means of gravity once a locking pin on the cell gate has been removed. Cans are loaded into each cell in horizontal position, all facing in the same direction.

A second new can-unloading system (photo below) is now being



used by F & M Schaefer Brewing Co., Brooklyn, N. Y. It also eliminates bulk carton packs of cans. Instead, 9,000 cans are loaded into bulk bins constructed of plywood that measure 90 by 90 by 48 in. in size. Several of the bins are shipped at a time on a trailer truck and they



NOW! Maintain constant thin-liquid volumes with MOJONNIER * "ELECTROMATIC" FILLER

**ADAPTS TO WIDE VARIETY OF
CONTAINERS BY SIMPLE TIME
SETTING AND NOZZLE CHANGE**

CUTS PRODUCTION COST

The Mojonnier "Electromatic" filler is the most efficient and accurate unit available for filling constant volumes of thin-liquids. You will immediately note a big savings in product waste alone, because the Mojonnier "Electromatic" filler reduces overfill to a minimum.

PROVEN EFFICIENCY IN MAJOR INDUSTRIES

There are Mojonnier "Electromatic" fillers in such companies as: Swift and Company for filling No. 10 size cans... Dow Chemical Company for filling Methyl Bromide (a poison)... Republic Food Products Company for putting an exact amount of oil into cans filled with sausage without spilling... General Electric Co., Hot Point Div., for metering precise amounts of oil into the fluid coupling of household washing machines... and the Ayerst Laboratories for filling glass bottles with volatile anaesthetic.

Mojonnier "Electromatic" fillers play a major part in filling over 90 per cent of the Aerosol products in the market today. Plus... its use by over 2200 dairies.



Write for free bulletin 856

* T.M. REG. U.S. PAT. OFF.

MOJONNIER
Associates, Inc.

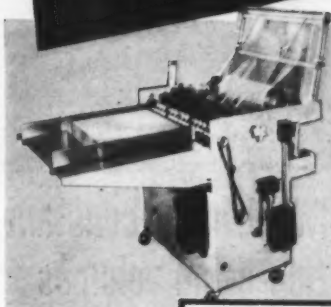
9151 FULLERTON AVE. FRANKLIN PARK, ILL.

See these Fully-Automatic
Peters PACKAGING

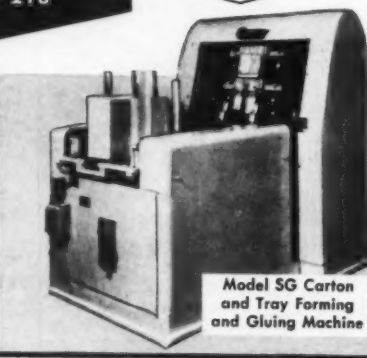
MACHINES IN ACTION

AT BOOTHS 211 and 218

Packaging Machinery
and Materials Exposition
Public Auditorium,
Cleveland, Sept. 11-14



▲ Model UD
Cellophane Sheeting
and Stacking Machine



Model SG Carton
and Tray Forming
and Gluing Machine

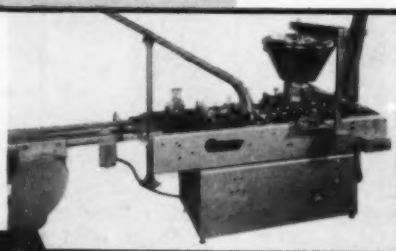
Model L-2
Cellophane Bag
Sealing and Header
Applying Machine



Model CCY-1
Carton Folding
and Closing Machine

Introducing
PETERS' NEW MODEL GT
DOUBLE-ROW
SANDWICHING MACHINE

Makes up to 1400—or more—cookie or cracker sandwiches per minute...off-the-oven or fed from base boxes. Stacks finished sandwiches in two rows or counts and groups for automatic packaging.



Peters MACHINERY COMPANY

4712 Ravenswood Avenue
Chicago 40, Illinois
Phone: Longbeach 1-9000

are removed at the brewery by means of a platform conveyor and a fork truck. The plywood bins are then delivered directly to a conveyor feeding the unscrambler at the end of a beer filling line, where the cans empty out through a gate on the narrow end of each bin. Empty bins are then returned to the can supplier.

Credits: Minute Maid unloading system by Crown Cork & Seal Co., Ashton Rd. & Grand Ave., Philadelphia 36. Schaefer system by American Can Co., 100 Park Ave., New York 17.

Packaging for inventory

[Continued from page 121]

are easily identifiable through the translucent walls of their bags, can be removed and replaced as needed.

The bags used by Ford Instrument are produced from 4-mil polyethylene and hot-wire sealed on three sides. The zipper device, which utilizes two strips of extruded polyethylene, is electronically sealed to the top lips. Ford is now using the bags in four sizes: 4 by 6, 6 by 9, 9 by 12, and 18 by 18 in.

After parts have undergone final testing and inspection, each is placed by hand into one of these bags. Along with it goes a standard printed stock card, which bears its complete description and engineering data.

After having been packaged in this fashion, the parts are stored in the stock room until all the components for building a particular instrument have been compiled—a matter of from 30 days to six months. Then, the appropriate assortment of bagged parts is shipped to the plant's assembly section. A supply of spare parts, packaged in the same way, is also kept in the stockroom.

After the parts have gone into the assembly of an instrument, their bags are returned to the stockroom for re-use.

As far as cost is concerned, the mathematics are very simple. The polyethylene zipper bags cost Ford about 2 cents apiece, on the average, as compared with 1 cent for the previous package, a manila clasp envelope. The transparent bags can each be used about three times; the envelopes as a rule survive only a single trip.

*They do everything
but
jump off the shelf...*

**Bags made of
NIBROC®
white!**

At the very heart of today's supermarkets, the point of sale, bags made of Nibroc White—millions of them—really have sales jumping.

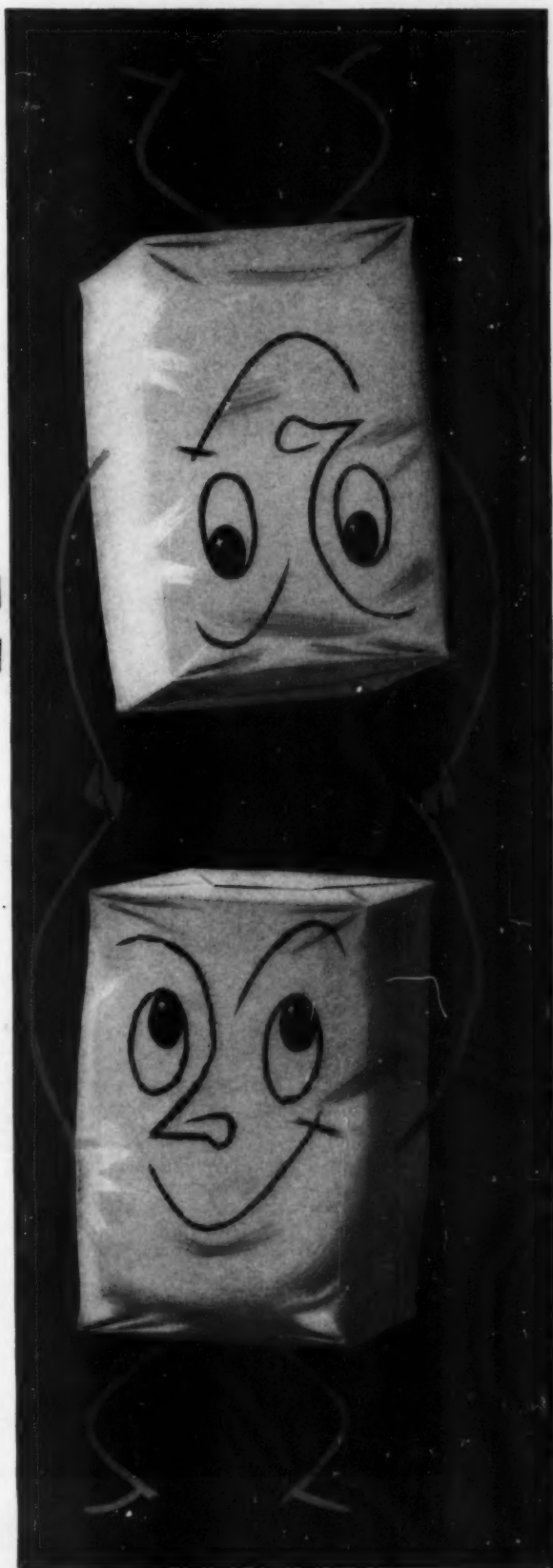
They stand out! Clean, brisk, bright printing is their dish! For you and your customers, they mean faster sales of your coffee, flour, rice, dog food, or whatever!

They're stronger! From the grocer's shelf all the way home to the pantry, tough-yet-flexible Nibroc White bags safeguard their contents—deliver your products fresh and sound.

Our customers will make any bag you desire from Nibroc White. For samples and more information, write or phone our *Paper Sales Division*, Dept. DR-8, our *Boston office*.

BROWN  **C O M P A N Y**
Berlin, New Hampshire

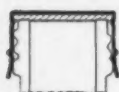
General Sales Office: 150 Causeway Street, Boston 14, Mass.



He can't counterfeit, he can't pilfer...when you seal with **Alcoa® Pilferproof Closures**

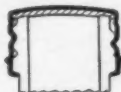
If he tries to open one of those bottles with an Alcoa Pilferproof seal, a slotted band will break on the first opening twist. This exclusive burglar-alarm band announces: *This Bottle Has Been Opened.*

Alcoa Pilferproof seals can be applied *only* by a machine which we sell or lease *only* to reputable manufacturers. Let us show you how to lick the problems of pilfering, tampering, counterfeiting. Call your Alcoa sales office.



**BEFORE
APPLICATION**

Straight-sided skirt of pure nontoxic Alcoa Aluminum is placed on the container and held under uniform, controlled pressure. Each Pilferproof closure is tailor-made to the individual container it seals.

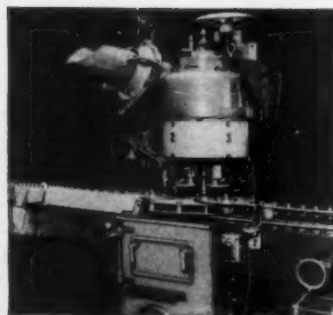


**AFTER
APPLICATION**

Glass sealing surface is embedded into the liner, making a positive seal. Then rollers form the skirt to the exact contours of the bottle threads. Since the cap does not turn, liners are never closed.



WRITE FOR BOOKLET
—Alcoa Closures,
Aluminum Company
of America,
1705-H Alcoa Bldg.,
Pittsburgh 19, Pa.

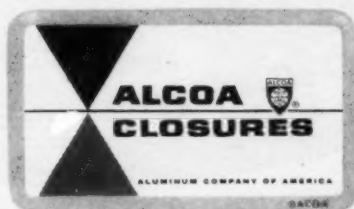


ONLY THIS SEALING MACHINE can apply Alcoa Pilferproof Closures. We sell or lease it only to reputable manufacturers. Available in four models with speeds ranging up to 400 bottles per minute.



Exclusive burglar-
alarm band says:
This bottle's
been opened.

*Your Guide
to the Best in
Aluminum Value*



At Your Grocer's Now—



Now Aluminum Foil



THE ALCOA HOUR
TELEVISION'S FINEST LIVE DRAMA
ALTERNATE SUNDAY EVENINGS



Sample Can \$2.00
 Per Dozen . . (At \$1.15 each) . . \$13.80 net
 Per Gross . . (At \$1.00 each) . . \$144.00 net

INJECTION MOLDERS SUPPLY CO.
 3514 LEE ROAD • WYoming 1-1424 • CLEVELAND 20, OHIO

West sets record

With an attendance of 8,600, the sixth biennial Western Packaging & Materials Handling Exposition, July 10-12, in Los Angeles, was a highly successful event, breaking all previous records by more than 200 registrants.

Consistently good crowds visited the show throughout the three days. A total of 148 exhibitors displayed a colorful array of the latest in packaging materials and equipment, reflecting the West Coast's unprecedented expansion.

Not only was the emphasis on packaging developments of traditional importance to the West—produce, frozen foods and wines—but on advanced packaging for all manner of consumer goods, now produced in West Coast branch plants of national companies and new local firms springing up to serve the increasing Western population.

The continued migration to the West was indicated further by the keen interest shown in improved ways to package drugs, chemicals, furniture, building materials and hardware. The movement of the aircraft industry and automotive assembly plants to the West Coast was revealed by the large number of visitors attracted to exhibits of parts packaging and protective packaging for delicate industrial instruments.

The new location this year—the Pan-Pacific Auditorium—was a pleasant and convenient one for this show, sponsored and managed solely by Clapp & Poliak, alternating every other year between Los Angeles and San Francisco.

There was no conference in conjunction with the show. However, meetings held at the same time in Los Angeles by the National Flexible Packaging Assn. and the Western Packaging Assn. attracted additional visitors to the show.

Registration figures showed attendance well distributed over the 11 states west of the Rockies, with the largest numbers being drawn from the Los Angeles and San Francisco areas.

Continued importance of the show was indicated by the large number of national exhibitors participating to bring newest developments in packaging before Western packagers

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who find it impractical to visit the American Management Assn.'s annual national packaging show.

The Western exposition was primarily a packaging show, with the materials-handling element still not conspicuous. Exhibits revealed comprehensive coverage, stressing the newest in paper, metal, film and plastics packaging. Equipment booths featured among other things, the latest in vacuum forming, bag making and sealing, bottle and can filling, cartoning, capping, conveying, electronic-control devices, package laboratory testing devices—in fact, everything designed to meet today's demand for faster production and more efficient operation.

Exhibitors generally were impressed with the seriousness of the visitors. Controlled registration helped to eliminate most of the off-the-street sightseer element. Those who attended seemed to be there for the purpose of viewing the latest packaging developments and to find out how to apply them to their own production and sales problems.

San Francisco has been designated as the site for the next Western Packaging & Materials Handling Exposition to be held in 1958, according to Saul Poliak of Clapp and Poliak.

One-way bottles

A million-dollar promotion campaign for no-deposit quart-size beer bottles has been started by Owens-Illinois Glass Co. The comprehensive program, which will include heavy magazine and newspaper advertising, began last month. At least 20 full-page ads in "Life" and "Look" and 477 newspaper ads in 36 major markets will be used to implement the program.

Special appeals to be featured in the campaign are: "beer stays cold longer in quart bottles," "no-deposit bottles are more convenient," "pouring through a bottle neck gives proper aeration to beer," "glass has no taste of its own" and "quart bottles give full glasses of beer."

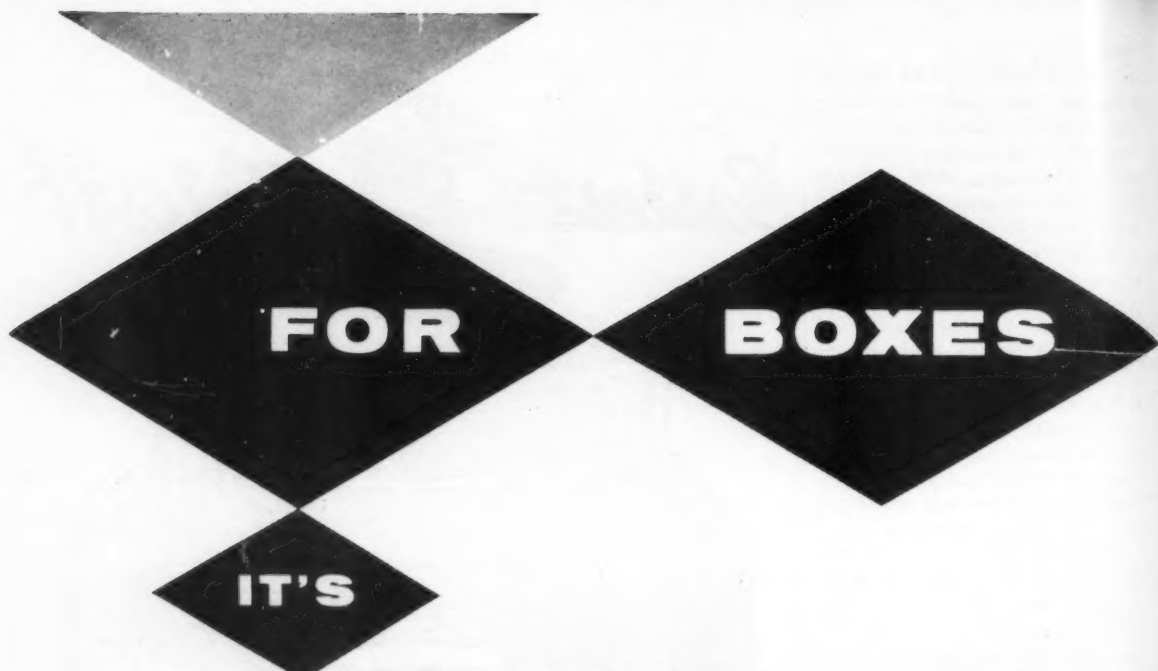
Announcing the program, Smith L. Rairdon, Owens-Illinois' vice president in charge of marketing, said, "No-deposit quart beer bottles not only combine convenience and economy, but in addition offer the consumer temperature maintenance and flavor protection."



One can	\$2.00 each
12 cans	\$1.50 each
144 cans	\$1.37 each

INJECTION MOLDERS SUPPLY CO.

3514 LEE ROAD • WYoming I-1424 • CLEVELAND 20, OHIO



ORNELL

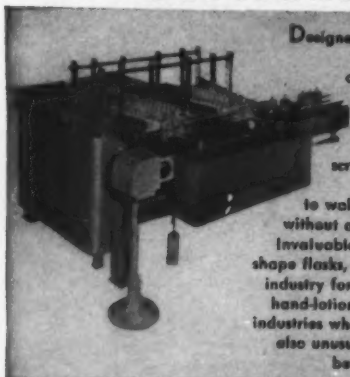
PAPERBOARD PRODUCTS CO.
MILWAUKEE 1, WISCONSIN

FOLDING CARTONS
CORRUGATED BOXES
SOLID FIBRE BOXES
SPECIALTY PAPERBOARDS
FIBRE WALL BOARDS

NEW! High Speed



UNSCRAMBLER



Designed to accommodate practically any size or shape container at speeds up to 400 to 450 per minute. Bottles, jars and other containers are unscrambled without agitation and transfer from chain to walking beam is very gentle, without any contact of containers. Invaluable in the distillery for odd shape flasks, in the drug and cosmetic industry for unusual after-shave and hand-lotion bottles, as well as other industries wherein not only round but also unusual shapes and sizes must be handled at high speeds.

FREE!

MAIL THIS COUPON FOR FULL DETAILS

ISLAND EQUIPMENT CORP.
27-01 Bridge Plaza North
Long Island City 1, N. Y.

Dept. MP8

Sounds interesting. Send me full details on your WALKIE-PUSHIE UNSCRAMBLER.

COMPANY.....

NAME.....

ADDRESS.....

CITY..... STATE.....

See it at the Packaging Machinery Show! Booth 512—Cleveland, Sept. 11-14



**PUT YOUR PRODUCTS IN
Clearsite PLASTIC JARS
FOR ALL TO SEE—AND BUY**

Clearsite Plastic Jars help increase sales, reduce shipping costs, practically eliminates breakage loss. They're moisture-tight, dust free, chemically inert. Easy to print or label. Stock sizes up to sixteen ounces.

Clearsite cylindrical plastic containers are produced in a wide variety of shapes, sizes, colors and closures. Write for free sample and descriptive literature to Department AA.

CELLUPLASTIC CORPORATION

Sales and Executive Offices Newark, New Jersey

NRDGA clinic

The first Packaging Clinic to be sponsored by the National Retail Dry Goods Assn. held a three-day meeting recently at the Hotel Statler, New York. Retailers and manufacturers from all sections of the country were addressed by speakers representing all phases of the packaging field.

At the first day's session, Edward F. Engle, manager of NRDGA's sales promotion division, said that department stores "have been the sleeping giants in packaging." He added, "Now we have the opportunity to catch up—and I predict that if we show flexibility and initiative in proper use of packaging, we shall not only catch up but shall lead the parade."

William Alford, III, chairman of the public relations committee of the Folding Paper Box Assn., spoke on "Department Stores Speak Out For Packaging," a report based on a study made by his organization and the NRDGA. (See "The Awakening Department Store," MODERN PACKAGING, June, 1956, p. 85.)

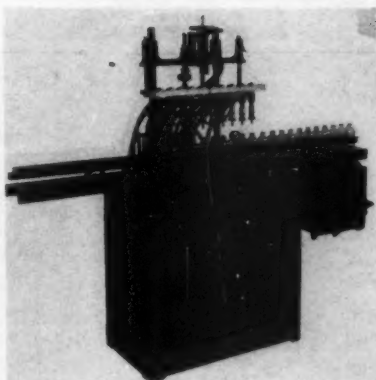
Speaking on "Better Outpost Merchandising Through Packaging," George McCleary, Olin Film Div., cited hosiery as one of the best examples of "outpost" merchandising, where merchandise is offered through self service and packaged in eye-catching fashion.

Jack Welsch, Exquisite Form Brassieres, talking on "Common Denominators of Profitable Packaging," called for greater coordination of departments in the store and said that "the rate of increase in sales due to packaging is in direct proportion to the accessibility of the package to volume traffic."

Richard B. Schlesinger, Carson Pirie Scott & Co., Chicago, described "What Makes a Successful Package" and stressed that good creative packaging offers retailers an opportunity to build character and personality for their stores.

Final speaker on the first day was Gerald Stahl, vice president of the Package Designers Council, who said packaging is mainly a "problem of sales strategy at point of purchase." He listed points to be kept in mind when designing a package for self-service selling.

Five speakers participated in the second day's session. First was Noel



NEW

FASTER FILLING

FOAMLESS

DRIPLESS

FASTEST CHANGEOVER

PERL FILLING MACHINES

FOR VACUUM, GRAVITY OR PRESSURE

ALSO AVAILABLE WITH

ELECTRO PNEUMATIC CONTROLS

New design model COS-K, illustrated, operates by vacuum, in a range of sizes and filling speeds from 20 to 100 bottles per minute and capacities up to 5 gallons. No foot pedals, no hand levers, just a touch of a button! Even the most unskilled operator immediately attains full production speed.

Write for Circular P-6



PERL MACHINE MFG. CO., INC.

68 Jay Street, Brooklyn 1, N. Y., MAin 4-0165

foilcraft



FLASHMANSHIP!

makes 'em

STOP

LOOK

BUY



Write Dept. MP
for FREE copy.

Flag sales attention to your product with the glitter of foilcraft "Flashmanship" . . . adapt its eye-catching sparkle to your labels, seals, wraps,

tip-ons, displays or complete protective over-wraps. It costs so little to add the sales flavor of Foilcraft to your product.



FOILCRAFT PRINTING CORPORATION

Brooklyn, New York
3611 74th Avenue, GEdney 6-4516

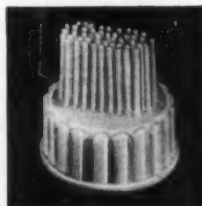
Cincinnati, Ohio
Roselawn Center Bldg., MEIrose 8963

DISPENSERS CAN BOOST SALES TOO . . .

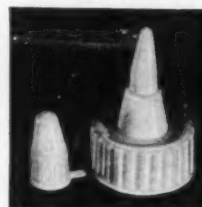


Polyethylene controlled drop dispenser used for E. R. Squibb & Sons "Sweeta" liquid sweetener

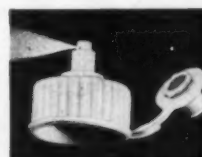
And here are some other Stull Sealiner special purpose dispensers:



Cap-n-Bristle*—One piece, threaded closure, molded of polyethylene. Perforated base feeds liquid for brush-like application.



Spout-n-Closure*—Spout is molded closed, providing primary seal. Consumer snips the tip open, then applies attached cap for use as a reseal closure.



Cap-n-Closure*—Small cap is attached to head by flexible web, eliminating loss or misplacement. Available as a vertical or side-spray dispenser. Side-spray eliminates tipping and tilting. Just hold container straight up . . . right angle spray can be aimed without effort.

Take the Stull Sealiner all-polyethylene drop dispenser on the Squibb "Sweeta" bottle, for example. Designed by Stull to release precisely measured quantities—two drops are equivalent to one level teaspoonful of sugar in sweetening power—this precise, waste-proof dispenser increased sales considerably.

Stull has developed *controlled dispensing* polyethylene closures for every type of product . . . foods, chemicals, pharmaceuticals, cosmetics . . . dispensing measured drops, completely atomized sprays, free-flowing pours, controlled pours—whatever method makes for easy, economical use.

And Stull's system of thorough supervision of every step—design, tooling, production—makes for precision products manufactured to rigid quality specifications.

But see for yourself. Send for your **FREE** Stull Sealiner catalogs, illustrating the entire line of over 75 stock fittings and closures. This broad range is proof of the Stull Design Department's versatility. And if you don't find a closure for your particular needs, take the problem up with Stull. They will design a fitting to suit your special requirements—then follow through on production—efficiently, economically, and promptly.

All closures available in a range of popular colors.

Over 60 distributors in principal cities throughout the U. S.

stull

ENGRAVING COMPANY

223 Santa Avenue, Garfield, New Jersey

Special purpose closures—for every purpose

*Pat. applied for

Mudd, J. L. Hudson Co., Detroit, who discussed "In-Store Packaging Coordination" and stressed the importance of strict quality control over color dyes in packaging materials to maintain this basic form of store identification.

Ralf Shockey, Ralf Shockey & Associates, spoke on "The Pay-Off is in the Take-With," based on findings of a survey his firm conducted for the Folding Paper Box Assn. and the NRDC. The study showed, he said, that "take-withs" ranged from 68 to 88.9% of sales and retailers are placing more emphasis on packages that encourage customers to carry purchases with them.

Alan Berni, package designer, told the session "stores are losing thousands of dollars daily because of inefficient product packaging." His topic was "The Flight for Position on the Retailer's Shelf."

Speaking on "Meeting Competition Through Better Packaging," John V. Shea, Lassiter Corp., said that better packaging will improve self-service opportunities in stores' hosiery departments.

Final second-day speaker was Louis Cheskin, Color Research Institute, on "How to Predict Packaging Success." He said that "the package has become the most important single factor in marketing" and added that factors appealing to one customer will not necessarily appeal to another.

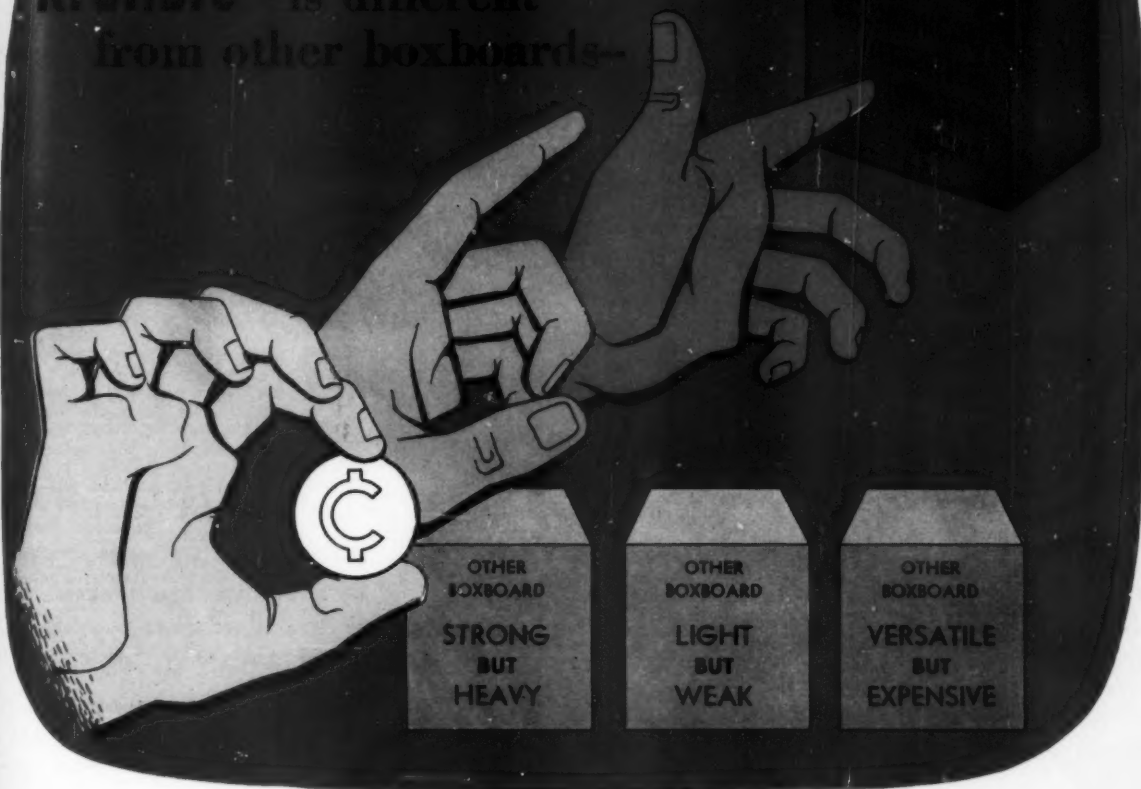
Leading off the third day's session, Charles A. Breskin, publisher of MODERN PACKAGING, spoke on "Horizons Unlimited" and predicted that most of tomorrow's products will be designed to take advantage of new packaging developments. In retail stores, he said, packaging will increase sales productivity and perform a function similar to that of automation in the factory.

Harry S. Lapow, Koodin-Lapow Associates, said that imaginative gift packaging can lead to broad horizons in this field for "useful" as well as decorative items. "Dress Up Your Cinderella" was his theme.

Final speaker on the program was T. H. Strauss, Susan Crane Gift Packaging, who discussed "The Gold Mine of Gift Packaging."

A feature of the second day of the Clinic was the Irwin D. Wolf Memorial Luncheon, honoring the late president of Kaufmann's Department Stores, Pittsburgh.

**Krafibre® is different
from other boxboards—**



for one thing . . . it gives you **MORE FOR YOUR MONEY!**

Krafibre is available in natural, white lined and a rainbow of colors. Krafibre prints and handles beautifully, being adaptable to many special treatments.

Krafibre packages *keep* their fresh, smooth, "just-printed" attractiveness that has swayed a million impulse sales without help from sales clerks. The biggest difference between Krafibre and ordinary boxboards is where it counts the most — *at the point of purchase!*

Krafibre was developed by Columbia to permit better packaging more economically!



COLUMBIA

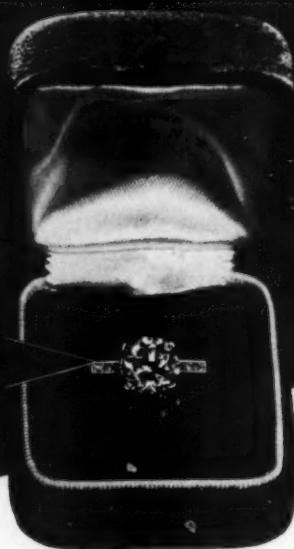
BOX BOARD MILLS, INC.
CHATHAM, N. Y.

Write today for actual proof — the Krafibre sample kit that you can examine and test yourself, to see the big difference better than we can describe it!

Please send me the Krafibre Sample Kit.

NAME.....
TITLE.....
COMPANY.....
ADDRESS.....
CITY..... STATE.....
MY BOXMAKER IS.....

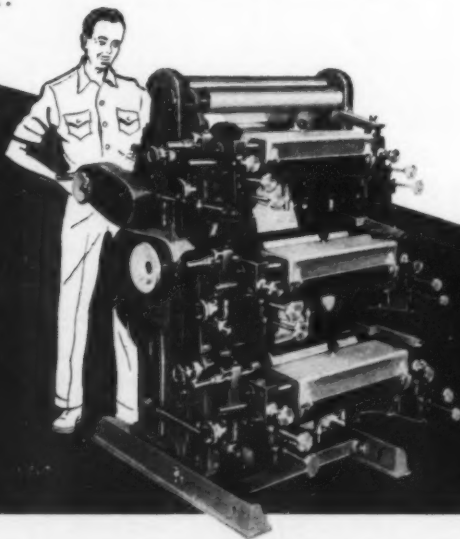
GOOD
THINGS COME
IN SMALL
PACKAGES



the HHH Lilliput Flexographic Press...

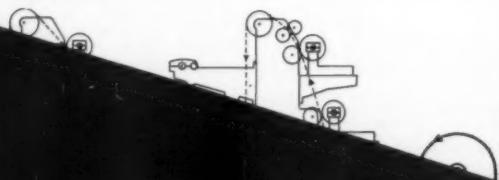
AVAILABLE ALSO IN TANDEM COMBINATION

Definitely a "standout" in the quality field, this "Pony Size" production press meets a vital need by providing low cost facilities for handling short runs, PROFITABLY.



There's nothing like it on the market. The HHH Lilliput does countless small jobs that otherwise tie up a big press. Prints one to three colors . . . up to six colors in tandem . . . on paper, polyethylene, cellophane, mounted aluminum foil etc.

Here's a "good thing" at a *very low price*, sold as a package, complete with dryer . . . ready to go to work for you NOW. Excellent deliveries . . . send for prices and specifications and *arrange for a demonstration* at our show room.



H. H. HEINRICH COMPANY

Use this handy coupon to send for full information on H. H. H. LILLIPUT.

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HELPFUL LITERATURE

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There is valuable data — worth dollars and cents to you — in the literature and samples described below.

EQUIPMENT • SUPPLIES • SERVICES

PACKAGE CODING MACHINE. Illustrated folder describes machine for printing characters on container bottoms. Machine is fully automatic, can be fitted into packaging conveyor line. Diagrams illustrate various installations and production methods. John R. Nalbach Engineering Company. (H-651)

HOW TO APPLY PACKAGING TAPES. Illustrated 16-page catalog describes line of taping machines, including hand dispensers and special dispensers for industrial use. Discusses operation and function of each machine, and includes a chart showing which tapes each machine accommodates. Minnesota Mining and Manufacturing Company. (H-652)

PASTURIZER FOR CANS AND GLASS CONTAINERS. Illustrated folder describes the "Camco Roll-Thru" unit used for heating or cooling of round containers, either metal or glass. Discusses action of the machine, which is adjustable for different sizes. Canning Machinery Company. (H-653)

SMALL WEIGHING AND FILLING MACHINE. Illustrated leaflet describes bench or table model weighing and filling unit, capable of handling both free flowing and non-free flowing materials. Explains operation, discusses features and gives specifications. Pack-Rite Machines. (H-654)

CLOSURES AND SEALING MACHINES. Catalog describes company's metal line of closures for bottles and jars. Closures include non-threaded and vacuum types. The sealing machines are designed to apply the company's line of caps. Anchor Hocking Glass Corp. (H-655)

RUST PREVENTIVE WRAP. Booklet describes a vapor phase inhibitor paper used to prevent corrosion. Tells how wrap acts as a protective agent. Lists applications, and includes table of protection-life under various weather conditions. The Marvel-Hum Company. (H-656)

PORTABLE LIQUID FILLER. Bulletin describes portable vacuum type liquid filling machine. 75-pound unit can be moved about freely, operates from any electrical outlet, and fits any container size and shape, from small vials up to one gallon capacity. International Filling Machine Corporation. (H-657)

PACKAGE WEIGHT CHECKER. Illustrated folder describes "Datamatic" weight calculating machine for spot checking weights of packages. Unit works with any type of check weighing scale and handles any size package ordinarily filled by package filler units. Scale Specialties and Systems, Inc. (H-658)

BILSTER PACKAGING. Folder describes company's method of vacuum forming transparent "bilster" packaging. Discusses materials used, mold making, steps in the process. Diagrams supplement text. Emet Vacuum Forming Corporation. (H-659)

"SPOT" COATER FOR BOX BLANKS. Illustrated 8-page brochure describes machine for spot coating individual box blanks in a specific pattern. Discusses coatings handled, box sizes accommodated, operating features. Gives specifications. International Paper Box Machine Company. (H-660)

STAPLERS. Illustrated 12-page catalog covers company's extensive line of stapling machines, including models for stapling bags and cartons. Also describes company's wire stitching machines. Gives applications for each model. Bostitch. (H-661)

FACTS ABOUT PRE-PACKAGING. 30-page pamphlet discusses pre-packaging of products in corrugated units ready for sale. Discusses advantages on all levels of distribution and lists requisites of good pre-packaging. Hinde & Dauch. (H-662)

HISTORY OF LABELS. Sprightly 48-page illustrated booklet traces the history and developments of labeling techniques from those as early as 3000 B.C. down to the present day. Includes extensive section on labeling as a sales device. Allen Hollander Company. (H-663)

COMBINATION FEEDER-COUNTER. Illustrated folder describes adjustable hopper that counts as it feeds small objects such as bolts, nails, buttons, tablets and pills at speeds up to 200,000 items per hour. Folder describes working parts, gives speeds for typical items. U. S. Engineering Co. (H-664)

SKIN PACKAGER. Bulletin describes machine that packages product on a printed card covered with a skin-tight film of clear plastic. Covers steps in operation, gives production capacities and speeds. Also lists specifications. Benari Industries. (H-665)

WAXES FOR COATINGS AND ADHESIVES. Illustrated brochure describes production and applications of "Multiwax" line of microcrystalline waxes. Applications, specifications, available forms are listed. Petroleum Specialties, Inc. (H-666)

NEW METERING-DISPENSER. Folder describes device for converting containers into automatic measuring dispensers for dry, free-flowing materials. Attachment, a die cut cardboard insert, can be fitted into boxes, cans or jars. United States Metered Container Corporation. (H-667)

MARKING EQUIPMENT MANUAL. 32-page handbook gives details on the use and care of such varied marking equipment as fountain brushes, stencil machines, and carton tapers. Marsh Stencil Machine Company. (H-668)

PACKAGE PLANNING. 4-page booklet describes company's "Craddock Plan" for coordinating the efforts of package designer and printer in the preparation of package wraps to provide improved reproduction and better product protection. The Specialty Paper Co. (H-669)

PAPER CONVERTING MACHINERY. 24-page illustrated booklet describes a line of web processing machines, including models suitable for the coating, laminating, printing and general winding of paper and plastics films. Dilts Division, Black-Clawson Co. (H-670)

LABELING MACHINE. Illustrated bulletin describes a three-station label applicator that can label round, square, flat or panelled containers at speeds up to 150 per minute. Discusses operating features, gives specifications. Includes floor plan diagram. Economic Machinery Co. (H-671)

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EQUIPMENT • SUPPLIES • SERVICES

6-CAN CARTONER. Illustrated folder gives details of packaging line that sets up, packs, and seals a 6-can carton, then loads into shipping containers and seals at speeds up to 450 cans per minute. J. L. Ferguson Co. (H-672)

FILLING MACHINES. Illustrated folder describes company's line of equipment for filling paper or plastic cups at speeds up to 80 a minute with such foods as cottage cheese, ice cream, and prepared salads. Diagrams illustrate working principles. Triangle Package Machinery Co. (H-673)

AEROSOL VALVE. Illustrated 8-page folder describes non-metallic valve for bottle-shaped pressurized containers. Includes diagram of working principle, and illustrations of valve variations for horizontal and vertical, foam and mist type dispensing. The Risdon Manufacturing Co. (H-674)

FLEXOGRAPHIC PRESSES. 6-page illustrated folder describes Fischer and Krecke flexographic presses for one or multi-color flexographic printing. Covers operating features, gives specifications. Describes line of accessories and attachments. Kenneth J. Moore & Co. (H-675)

MARKING AND IMPRINTING MACHINES. Illustrated folder describes line of machines for coding, marking and imprinting packages and parts. Machines covered include portable imprinters, a web printer, and a roll marker. Illustrations show machines set up in conveyor lines. Adolph Gottschalk, Inc. (H-676)

HIGH ACCURACY LIQUID FILERS. 6-page illustrated folder describes extensive line of machines for filling tubes, ampuls, and vials. Describes operation of each unit, gives specifications and applications. Popper & Sons, Inc. (H-677)

CARTON STAPLER. Folder describes portable staplers suitable for closing all types of corrugated and fiber cartons. Illustrates grip action of staples. Discusses features, gives specifications. International Staple & Machine Co. (H-678)

PACKAGING AND BOTTLING EQUIPMENT. 8-page illustrated catalog describes company's extensive line of pneumatic machines for various packaging operations, including carton feeding, bagging, powder filling, vacuum filling, capping, heat sealing, weighing and wrapping. Pneumatic Scale Corp., Ltd. (H-679)

CONTINUOUS CONTOUR PACKAGING MACHINES. 8-page illustrated brochure describes "Rol-Pak" vacuum forming and packaging machine. Working from roll or material, unit automatically inserts product, laminates, heat seals, and trims individual packages. Also covers other sheet plastic forming machines. Comet Industries. (H-680)

PLASTIC FILM BAG MAKER. Illustrated folder describes operation and gives specifications of a combination sheeter and/or bag maker. As sheeter, machine accommodates paper or film rolls up to 24 inches wide. Unit also makes bags from tubular stock in lengths up to 100", widths up to 24". Lectromatic Devices Inc. (H-681)

LIGHT DUTY WEB CONTROLLER. 8-page illustrated folder presents details on air-actuated unit for guiding web edge of films, foils, and papers used on smaller slitters, presses, and other packaging equipment. Illustrates typical hookup with web machine. Askania Regulator Co. (H-682)

CHART FOR PACKAGE PRINTING. Chart tabulates amount of stretch of rubber printing plates when mounted on press

cylinders of various diameters, thus enabling artists to compensate for distortion when preparing artwork for reproduction. Porter & Dugas, Inc. (H-683)

SAMPLES OF NEW BARRIER PAPER. Company offers samples of three-ply laminated paper (kraft-black polyethylene-kraft) that provides protection against moisture, grease, light and fungus. Crocker, Burbank Papers, Inc. (H-684)

PHOTOELECTRIC EDGE GUIDANCE. Folder describes fully automatic edge control for good registration and accurate slitting of paper (kraft-blackpaper (kraft — blacking principle and features of unit, which is accurate to within 1/32 of an inch at any speed. Inter-Continental Dynamics Corp. (H-685)

PRODUCE PREPACKAGING STUDY. 12-page booklet gives results of a time study of produce sales in retail food stores. Report shows that prepackaging increases sales in self-service produce department. E. I. du Pont de Nemours & Co. (H-686)

HANDBOOK ON ALUMINUM FOILS. 22-page manual gives properties and describes features of "Venesta Foil." Includes an explanation of how the foil is manufactured. Discusses application of "Venesta Foil" as a packaging material for tobacco, foods, confectionery, and pharmaceuticals. Samples of various finishes are included. Venesta Ltd. (H-687)

GUIDE TO BAGS. 16-page illustrated catalog describes company's extensive line of bags for various packaging applications. Covers bags for packaging powder and granule products, fruit, meat products. Chase Bag Co. (H-688)

CAN PROCESSING MACHINERY. 8-page illustrated catalog describes equipment for high speed stamping of can ends, curling can bodies, and stacking can ends for easy handling. Covers operation of machines, gives full specifications. E. W. Bliss Company. (H-689)

BOTTLE CASELOADER. 4-page illustrated folder describes Model CK automatic caseloading machine for placing bottles in cartons and containers. Illustrates steps in the loading cycle, discusses features. Machine requires supervision of only one operator. Lynch Corp. (H-690)

DECORATIVE FOIL SAMPLES. Sample folders illustrate various finishes and textures of extensive line of decorative metallic colored, plain, embossed, and printed aluminum foils. Alufoil Products Co. (H-691)

COMPACT SHORT CASE SEALER. Illustrated leaflet describes line of "Seal Master" machines that seal top and bottom flaps, or top flaps only at speeds ranging from 300 to 1300 cases per hour. Elliot Manufacturing Co. (H-692)

SMALL HEAT SEALERS. Catalog sheet describes line of thermostat-controlled manually operated heat sealing devices: a hand iron, a hot plate, and a heat labeler. Wells Manufacturing Co. (H-693)

Fill out and mail this card now



BUSINESS REPLY CARD
First Class Permit No. 2656 (Sec. 34.9, P. L. & R.), New York, N. Y.

MODERN PACKAGING

Village Station Box No. 103

New York 14, N. Y.

you need a **CECO**® for...

C ontinuous

Depending on the size of the container, the CECO Model 40 will produce up to 40,000 clean, square cartons per day.

E conomic

This low cost machine requires only one operator for maximum production. It is adaptable for a wide range of carton sizes... the minimum investment in machinery for any packager.

C artoning

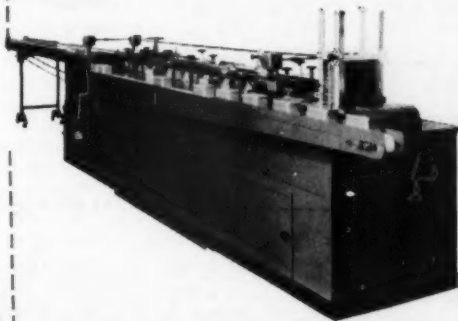
Models are available to tuck both ends, or glue seal both ends or tuck one end and seal the other.

O peration

With the product inserted manually, the Model 40 handles the carton automatically from hopping through closing or sealing.



Here are clean, square strong cartons produced at lowest cost — wide range of sizes for an even wider range of products — produced on the one versatile machine.



The Model 40, like all CECO Glue Sealers and Cartoners, is a self-contained unit, mounted on casters for easy portability.

CONTAINER EQUIPMENT CORPORATION

MEMBER, PACKAGING MACHINERY
MANUFACTURERS INSTITUTE

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an inexpensive
Photoelectronic Edge Guider

THE "Linar" EDGETROL® for...

ACCURATE PRINTING

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Textiles • Paper • Plastics
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"Automatically" saves hundreds of times
its cost per year • Reduces waste and
down-time.

Improves quality • Increases Production



1/32" Accuracy
at any speed

FEATURES:

- No force or pressure of any kind applied to moving material • The finest substances can be handled with perfect accuracy.
- Compact cast-aluminum sensing head with swivel permits instant adjustment of head to material
- Hydraulic actuator system for precise control
- Incorporates remote control and automatic interlock for extra safety
- Rugged construction for continuous duty and low maintenance
- Can be mounted anywhere
- Readily installed and maintained by plant electrician

Write for Bulletin to:

**INTERCONTINENTAL
DYNAMICS
CORPORATION**

170 COOLIDGE AVENUE
ENGLEWOOD, NEW JERSEY

First packaging and materials show

[Continued from page 157]

E. H. Watson, M. R. Frazier, G. Wiedersheim, S. R. Watson, F. P. Czifra, J. Kelly, E. Primosch, H. Weber. *Hotel: Auditorium.*

ARABOL MFG. CO. *Booth 554.* Exhibit of packages for which Arabol adhesives are used in labeling, sealing and wrapping. *Personnel:* A. J. Leary, F. Belle-tire, F. McCourd, W. Beaver. *Hotel: Statler.*

ARENCO MACHINE CO., INC. *Booth 114.* Display of Arenco tube-filling machine; Schubert Capsolut automatic capping machine and hand models; also literature on other automatic packaging machines. *Personnel:* R. E. Johnson, H. F. Morse, T. Gronberg. *Hotel: Cleveland.*

ATLANTIC SUPPLY CO. *Booth 561.* Semi-automatic labeling machine for round containers on exhibit for labeling bottles, jugs, metal cans, fibre canisters, steel drums, from 4 oz. to 5 gal., with either spot or wrap-around labels. *Personnel:* M. A. Long, D. I. Long, M. K. Itneyer.

BARTELT ENGINEERING CO. *Booth 103.* Display of a checkweigher and filler; also "Panel of Experts" to analyze packaging needs and problems. *Personnel:* H. Bartelt, D. Bartelt, B. Boston, B. Lamb, K. Johnson, C. Harker, A. Canfield, J. Uebler, C. Peterson, D. Baker. *Hotel: Cleveland.*

BATTLE CREEK PACKAGING MACHINES, INC. *Booth 116.* Display of two new wrapping machines and a new flexible packaging machine. *Personnel:* B. H. Redner, K. H. Redner, J. W. Smith, F. W. Willbrandt. *Hotel: Cleveland.*

BETTER PACKAGES, INC. *Booth 527.* Exhibit of gummed-tape dispensers for industrial carton sealing; pressure-sensitive tape dispensers; label moisteners; gummed-tape printer dispensers, stencil rollers and ink. *Personnel:* M. W. Waggoner, L. E. James, O. K. Hill, A. D. Smith, H. Wein. *Hotel: Statler.*

BIVANS, E. L., INC. *Booth 406.* Automatic carton-forming equipment on display. *Personnel:* E. L. Bivans. *Hotel: Cleveland.*

BROWN BAG FILLING MACHINE CO., INC. *Booth 413.* Exhibit of liquid packager; Formapak, for hardware, and Vibracount. *Personnel:* J. J. Doyle, W. E. Balzer, R. I. Perault, H. Olson, K. Ylonen. *Hotel: Cleveland.*

CHAFFEE, RALPH, & CO. *Booth 400.* Exhibit of heat-sealing machines for plastic films, including polyethylene, Pliofilm, cellophane, vinyl and saran; latest attachments for sealing machines,

including automatic in-feed, coder dater, hole-punching device and vacuumizing unit; special machine for military packaging and barrier-material sealing; also 16-mm. color movie of installations showing production-line heat sealing of bags of candy, cookies, dried fruit and fresh produce. *Personnel:* R. W. Chaffee, W. W. Hints, R. Compton. *Hotel: Auditorium.*

CHAIN BELT CO. *Booth 653.* All types and sizes of Rex conveying chains and sprockets; self-aligning bearings; also Rex roller chain and attachments. *Personnel:* G. Schuelke, R. V. Poisson, J. N. Tufts. *Hotel: Cleveland.*

CHISHOLM-RYDER CO. OF PA. *Booth 565.* Operation of complete packaging line, including feed table, labeling machine and casing machine; also wrap-around labeling machine with continuous label feed for right-hand or left-hand labels on cans, glass containers and aerosols. *Personnel:* J. P. Louderman, R. Louderman, G. R. Williams, W. B. Sanford, W. Reimer, H. G. Manley, K. B. Severson, E. J. Abendschein, C. M. Hesson. *Hotel: Cleveland.*

CLARK-AIKEN CO. *Booth 315.* Exhibit of Type "C" 64-in. rotary cutter and lay-boy unit with continuous fingers and Stevens counting and marking equipment; also two-roll collapsible roll stand with stub arbors. *Personnel:* J. C. Hart, J. J. Waddock, D. R. Grody, J. Marby, W. R. Perry. *Hotel: Hollenden.*

CLYBOURN MACHINE CORP. *Booth 216.* Display of CMC automatic carton and sealing machine; CMC Tuc-Pac machine; CMC taping machine. *Personnel:* H. Tellfors, F. Thomsen, S. Lindgren, H. Carlson. *Hotel: Cleveland.*

COLTON, ARTHUR, CO., Div. Snyder Tool & Engineering Co. *Booth 426.* Display of newly improved high-speed, multiple, liquid production-line filling machine that fills glass or plastics bottles, jars or cans at up to 480 containers per minute; new Model 212 single-rotary, high-speed tableting press that produces two-layer tablets up to 5/8-in. diameter at rates up to 1,000 per minute; the Model 542 granulator with unique mechanical drive that enables either rotary or oscillating granulating action; No. 175 automatic tube filler, closer and crimper for filling pastes, liquids and creams into tubes, bottles, jars or cans at 85 per minute; No. 130 hand-operated tube filler for filling pastes and creams at rates up to 30 per minute; No. 460 hand-operated tube closer for making quadruple-fold, clipless closures on tubes at up to 20 tubes per minute; also No. 430 foot-operated crimper for producing final corrugations at 30 tubes per minute on folded ends of tubes closed on No. 460 tube closer. *Personnel:* K. B. Hol-

[Continued on page 276]

3

DOES 3 JOBS IN UNISON!

**Folds, Seals Bags...
Attaches Labels**
in one effortless
operation

This revolutionary machine brings tremendous economies to users of labelled heat-sealable bags!

CUTS LABEL COSTS—Uses labels printed on *ordinary printer's enameled stock*. No special thermo-plastic coated papers required.

ATTACHES LABELS SIMULTANEOUSLY as bags are sealed. Handles tent or saddle-type labels.

FAST, HERMETICALLY-TIGHT SEALING—Neatly heat-seals against moisture, evaporation and contamination. No staples, no pins, no unsightly closures. One operator does the work of two or more!

SEALS ALL HEAT-SEALABLE BAG MATERIALS—Cellophane, pliofilm, polyethylene.

PROVED PERFORMANCE—Simple design, continually improved over many years, is your insurance of *long life and trouble-free performance!* Ask for literature!

Full line of HEAT SEAL-IT machines available

★ **GLOBE** ★
HEAT-SEAL, INC.
HEAT SEAL-IT DIVISION

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going crazy with



no need to, once you discover
the SIMCO "Midget" Static Eliminator!

Why cut out paper dolls when you can cut out static much more easily? The SIMCO "Midget" Static Eliminator is guaranteed to be the most effective, yet least expensive means available... for all packaging machinery, including cutting, slitting, bagmaking, wrapping, and filling machines! It is also adaptable to all types of materials, including paper and synthetic films. Write today for full information about your problem.

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TAILOR-MADE PAPERS
for
PROTECTIVE PACKAGES

NON-CORROSIVE GRADE A BARRIER MATERIAL

PREVENTS—Corrosion on
Bearings, Metal, Precision Parts,
Surgical Instruments, Tools, Etc.

Can be **TREATED** or **MOISTUREPROOFED** for greater
PROTECTION

Greaseproof Glassine

Single Ply

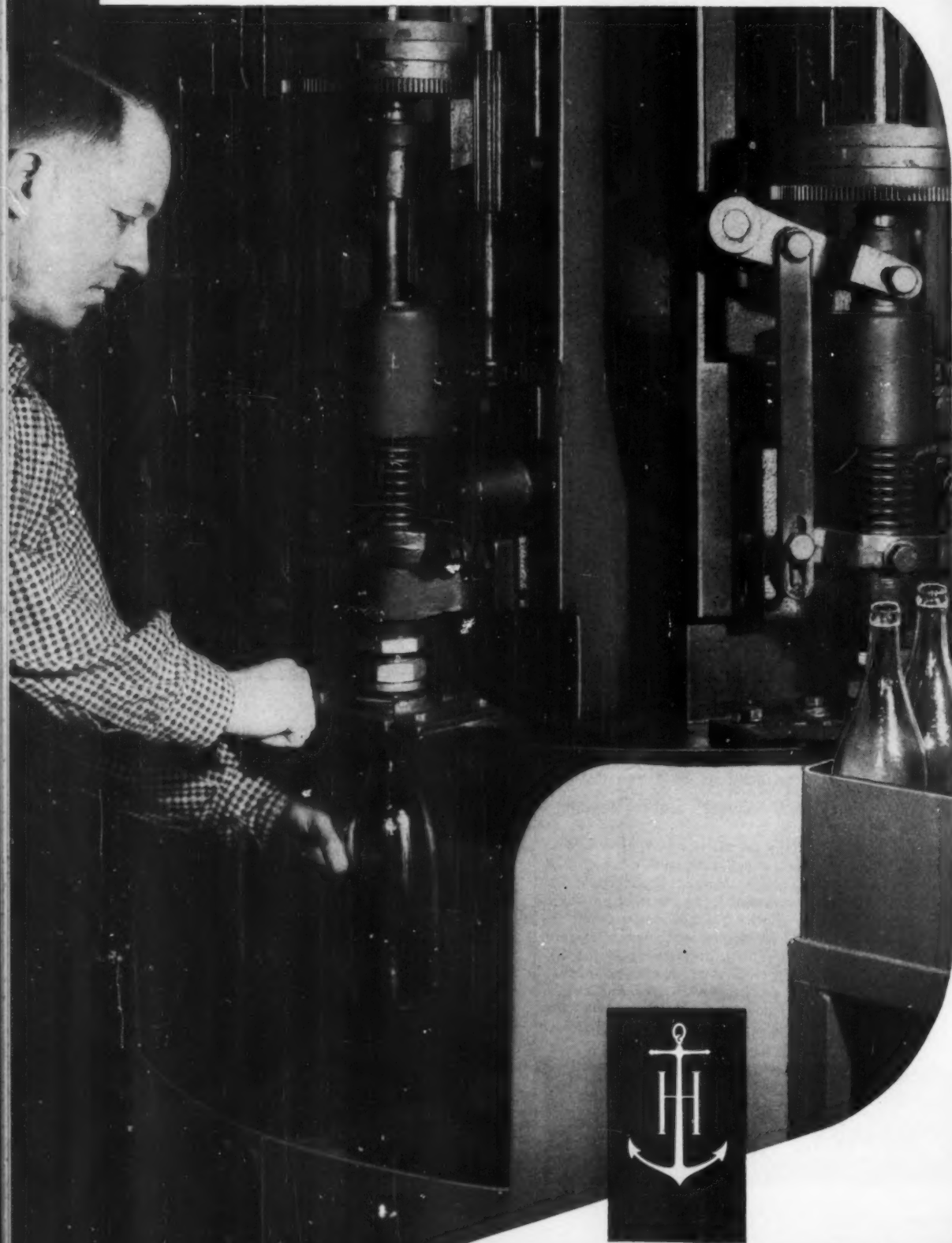
PLAIN • WAXED • TREATED • COATED
Duplex • Triplex

WAX LAMINATED • GLUE MOUNTED
to Glassine • Foil • Kraft • Sulphite

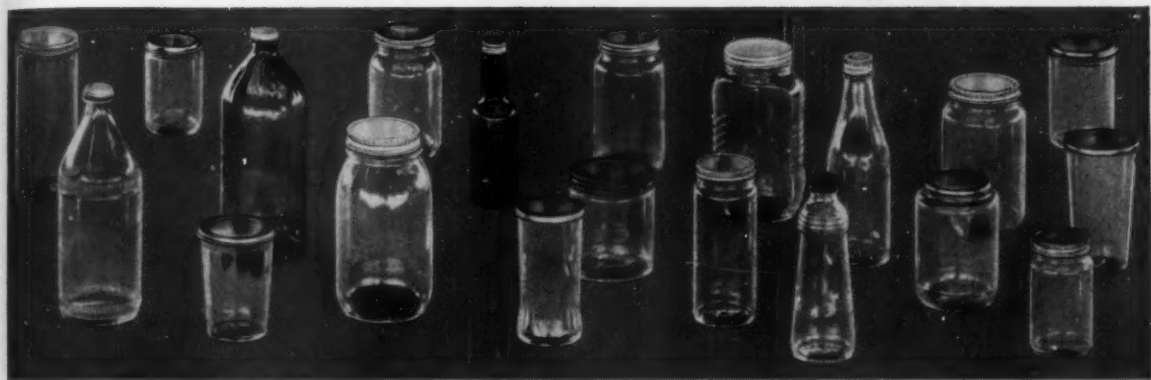
Inquiries invited from Converters and Merchants
"79 years of service"

THE **H**AMERSLEY MFG. CO.
PAPERMAKERS

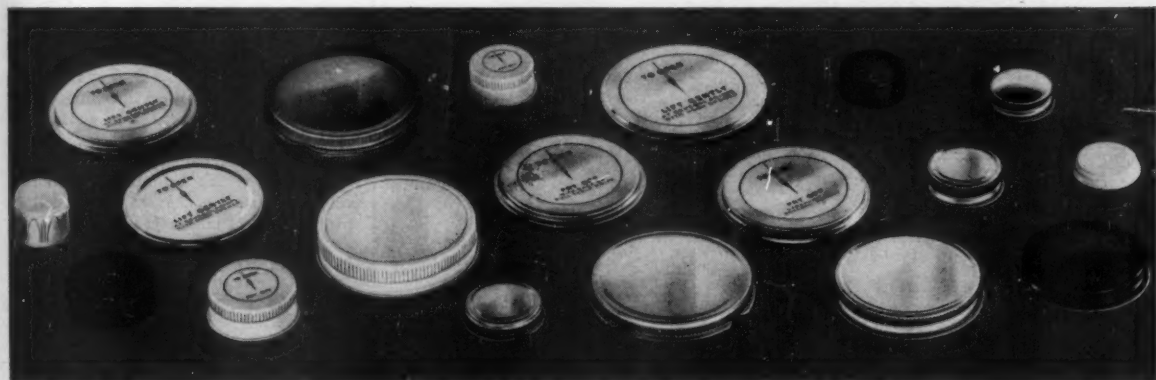
CONTROL IS A



S ALL-IMPORTANT *with Anchor Hocking!*



Regardless of what you pack Anchor Hocking makes an Anchorglass container in a style, size and color to most attractively, efficiently and economically package it. And regardless of how you pack it—hot or cold—with or without vacuum, sterilized or processed, there's an Anchor cap and Anchor sealing machine to completely satisfy your diverse and specialized requirements.



THE controls applied throughout your production and packaging operations are all-important to you. By the same token, the manufacturing controls employed by Anchor Hocking are very important to you, also.

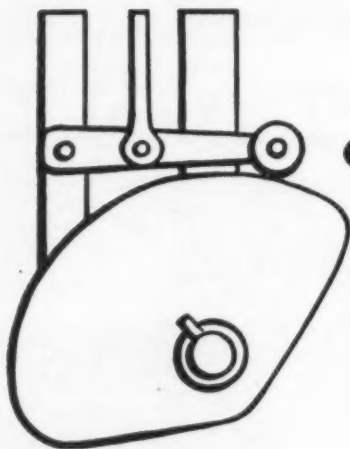
Anchor Hocking exercises literally hundreds of exacting controls, tests and checks daily in the manufacture of its glass containers and closures. From the selection of all raw materials used to the final inspection, every

operation is under meticulous control.

And all of this control, involving highly trained chemists, bacteriologists, engineers, other technicians and personnel, is done but for one reason. And that is, to provide you with uniform, high quality, dependable Anchorglass® containers and Anchor® screw, lug, vacuum, metal and molded closures that will give you high-speed, dependable production and protection.

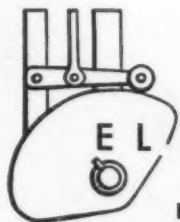
ANCHOR HOCKING

GLASS CORPORATION Lancaster, Ohio



The mark of Cartoning Simplicity

- tuck-o-mat
- convey-o-mat
- printer-coder
- carton closer



E L BIVANS, Inc.
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See us at booth 406 at the Packaging Machinery Manufacturers
Exposition in Cleveland, Sept. 11, 12, 13, and 14

increase the
sales potential
of
with
LOW COST

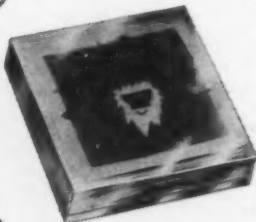
TRANSPARENT ACETATE COVERS

AUTOMATICALLY MADE—ELECTRONICALLY SEALED

for durability

strength

uniformity



A new, revolutionary method of producing acetate covers for boxes through the use of fully automatic high speed machinery results in a better, stronger product. Container Craft Inc. makes all these preferred features available to you at the lowest cost ever!

better because

- All corners are heat-sealed—hold longer, look better.
- Corner ridge made by electronic seal gives added strength.
- Only the highest quality acetate used.
- Optional gold leaf stamping.

Sizes from 4" x 1" to 10" x 6".
Write or call for quotations regarding your requirements.

CONTAINER CRAFT INC.

[Continued from page 272]

lidge, W. A. Doepel, N. Carman, A. Pearce, L. P. Gajda, H. C. Edgar, R. J. Clark, T. J. Casey, C. Gembolis, E. Kistner, W. I. Smith.

COMET INDUSTRIES. Booth 501. Operation of Mercury continuous vacuum-forming and packaging machine which fabricates, fills, seals and trims to form complete packages at rate of 5 to 20 ft. of completed packages per minute; also Meteor vacuum-forming machine for skin packaging. *Personnel:* J. E. Kostur, R. E. Kostur.

CONAPAC CORP., Holweg Div. Booth 602. New CP-2-TS machine on display for the manufacture of glue- and heat-sealed cellophane bags, combination bags and heat-sealed bags from polyethylene-coated papers. *Personnel:* F. L. Walton, R. H. Schnoor, J. H. Brezinski, A. Gans, A. Moravec, R. McClosky, E. E. Miranda, J. Fields, K. Fritts, F. diFranco, R. J. LaPierre, J. H. Beckman. *Hotel:* Hollenden.

CONTAINER EQUIPMENT CORP. Booth 302. Exhibit of Model 40-9½ adjustable cartoner which handles reverse-tuck-style cartons fully automatically from hopping through closing, allowing for hand insertion of the product. *Personnel:* Mr. & Mrs. F. W. Kucklinsky, A. D. Farnow, R. W. Walters, R. L. Taylor, W. E. Haberland, C. Ashe. *Hotel:* Cleveland.

CURRIE PACKAGING CO. Booths 605, 607. Exhibit of cartoning machine for carry-home can cartons; casing machine for new type of can cartons; small-size tray machine, medium-size tray machine; reverse-tuck set-up and filling unit; rotary strip packager; also stencil strip packager. *Personnel:* G. C. Currie, W. H. Porcher, Jr., D. E. Conrades. *Hotel:* Cleveland.

DENNISON MFG. CO. Booth 563. Exhibit of new Therimage labels, a new graphic arts process whereby effective printing can be achieved by the labeling process. *Personnel:* R. B. Hulett, J. H. Bond, R. G. Shepherd, W. F. Somerville. *Hotel:* Cleveland.

DIXIE WAX PAPER CO. Booth 751. Exhibit of all types of flexible packages for industry; wrappers of waxed glassine, wax-modified sulfites, polyethylene, cellophane and acetate; bags of waxed glassine, glassine, cellophane, foil, Pliofilm, polyethylene; letterpress, flexographic and rotogravure printing. *Personnel:* W. H. Bryce, Jr., T. S. Williams, L. T. Kimple, J. Morgan, W. C. Kimple, H. Phillips. *Hotel:* Statler.

DOBECKMUN CO. Booth 115. Plain and printed bag and roll-stock cellophane and polyethylene; polyethylene and cellophane stock bags for produce, bread, meat, textiles, etc.; examples and applications of zip-tape; also examples

and applications of laminated and extruded papers, film, foil and other combinations, both printed and plain. *Personnel:* E. P. Whitley, K. E. Prindle, R. C. Betts, W. W. Clark, W. Bader, J. M. Deegan, F. E. Wilson, W. L. Lenox, R. Reed. *Hotel:* Carter.

DUDLEY MACHINERY CORP. *Booth 430.* Exhibit of fully automatic and adjustable electronically controlled machinery systems which receive bulk-shipped can supplies, stores the jumbled cans and delivers the correctly positioned cans at any given speed, open end up, to multiple can lines; also automatic case dumpers to feed this system where users receive can supplies pre-cased in re-usable cases. *Personnel:* R. G. Dudley, R. C. Seaman, W. Kruse, N. Reiland, D. Lewis, M. A. Dudley. *Hotel:* Cleveland.

DU PONT, E. I., DE NEMOURS & CO., INC. *Booth 409.* Exhibit of various types of packages illustrating versatility of cellophane and the large number of machines on which it can be handled. *Personnel:* H. C. Broems, B. C. Robbins, W. J. Yerkes, W. J. Harte, N. Allen, D. D. Lanning, J. P. Wilkins, R. P. Henderson, W. M. Farrelly. *Hotel:* Auditorium.

ECONOMIC MACHINERY CO., Div. Geo. J. Meyer Mfg. Co. *Booth 421.* Exhibit of World Super C.M. labeler equipped to apply front and back body labels on a round food jar at speeds up to 320 BPM; representative labeled samples. *Personnel:* G. L. N. Meyer, Jr., J. F. Parsons, S. T. Carter, R. J. Geiger, A. R. Johnson, R. C. Poore, W. J. Kastner, A. O. Frykholm. *Hotel:* Cleveland.

ELECTRONIC MACHINE PARTS, INC. *Booth 420.* Display of photo-electric registration control equipment; complete line of E.M.P. units covering applications for intermittent or continuous rotary machines involving localization, spot cutting or synchronization. *Personnel:* W. T. McAdam, A. E. Handal, G. Geras. *Hotel:* Cleveland.

ELGIN MFG. CO. *Booth 558.* Exhibit of eight-valve rotary piston filler; place-pack olive packer; Model GSA wrapping machine. *Personnel:* G. R. Stevens, A. R. Stevens, E. E. Johnson, W. E. Jensen, W. B. Sanford. *Hotel:* Cleveland.

ELLIOTT MFG. CO. *Booth 210.* Case-sealing equipment on display. *Personnel:* E. J. Derderian, C. E. Cole, W. F. Kruse, N. P. Reiland, S. J. Groudel. *Hotel:* Cleveland.

ERIEZ MFG. CO. *Booth 321.* Demonstration of new Hi-Vi vibratory equipment; unit vibrators and vibratory feeders that accurately feed and control material from ounces to tons per hour. *Personnel:* R. A. Roosevelt, N. Hirt, J. Cenci, A. Israelson, W. W. Moyden,

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PROTEX pads and blankets give you the maximum interior cushioning protection obtainable and fit virtually any product or assortment you can name! The cost is substantially lower than most other forms of interior cushioning and take only a fraction of the time to pack. Avail yourself of this important money-saving clean method of packing. The protection your products get is superb...resists all forms of shock and protects the finish of the product as well. Ease of packing, availability of ample supplies of packing material on hours notice are important too...you don't have to order far in advance of production or store supplies all out of proportion to their rate of consumption.

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NATIONWIDE SALES & DISTRIBUTION

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Unlimited

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HARD CANDIES AND CREAMS (in serving dish)



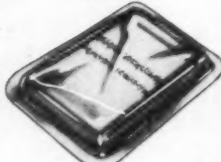
SPORTING GOODS



TOYS



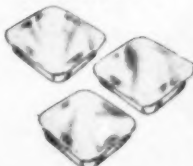
LINENS



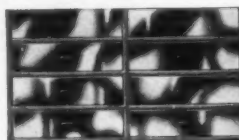
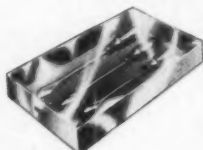
TOOLS



COSMETICS (single applications)



HARDWARE PROMOTIONS (each package becomes a drawer of a cabinet)



You Can Have Tomorrow's Package Today!



By laminating pre-printed kraft papers to clear plastic containers such as used in packaging of appliances and hardware.

By laminating plastic to plastic for packaging of foods, jellies, candies, eggs, liquids, spices, condiments, cosmetics and flower seeds.

Many new developments in the plastic field such as "Alathon," "Mylar," oriented styrene and many other non-toxic, chemical resistant films has made possible the ever growing use of visual plastic film packaging.

The Comet Mercury fabricates, loads, laminates and trims your complete packages at the rate of 5 to 20 feet of plastic per minute, offering for the first time a lower cost and more rugged package with greater eye appeal.

Send your packaging problems to us for solution.

A complete line of Vacuum Forming and Packaging Machines to solve any production and cost problem.



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FRANKLIN PARK, ILLINOIS
Progress in Plastics

W. T. Kendall, A. Merrifield, R. Braund.
Hotel: Cleveland.

FERGUSON, J. L., CO. Booth 110.
Exhibit of Packomatic automatic shipping-container imprinter and serial-numbering machine. Personnel: D. O. Ferguson, D. J. Wolfe, R. E. Paul, T. J. Rink, Jr., J. Knight, J. D. Cleaver.
Hotel: Statler.

FISCHBEIN, DAVE, CO. Booth 402.
Demonstration of portable bag closer, a completely portable sewing machine for closing filled textile and multiwall paper bags. Personnel: G. Fischbein.
Hotel: Auditorium.

FLOW MAGAZINE, MATERIAL HANDLING ILLUSTRATED. Booth 768.
Personnel: L. P. Aurbach, J. C. Kuester, E. Leighton, J. Velardo, R. Taylor, D. Sawyer.

FRAZIER & SON. Booths 202, 204, 206, 208.
Display of new Whiz-Packer volumetric filler with horizontal feed, designed to minimize breakage and tolerance in a broad range of products, for filling all types of nut meats, hard candies, drugs, powders, small produce, novelties and other fragile and granular products at speeds from 10 to 80 fillings per minute. Personnel: R. Frazier. Hotel: Auditorium.

GOTTSCHO, ADOLPH, INC. Booth 318.
Exhibit of Rolacoders, conveyer attachments for marking and code dating cartons or products; Rolaprinters, wrapping-machine attachments for code dating or imprinting package wraps; Markocoder, conveyor attachments for bottom code dating of bottles, cans, jars, etc.; also Imagraph, wrapping-machine attachment for package labeling using Therimage paper. Personnel: E. Coughlin, M. Hirschey, A. Jacits, I. Gottscho.
Hotel: Cleveland.

GRIFFIN-RUTGERS, INC. Booth 502.
Exhibit of Codedge label dating and coding machines. Personnel: C. F. Rutgers, W. B. King, R. F. Clark, Jr., L. Johnson, R. P. Anderson, W. K. Kruse, N. P. Reiland, S. Groudel. Hotel: Statler.

HAYSEN MFG. CO. Booth 215.
Exhibit of small-frame carton overwrapping machine for frozen food and other food products that operates at medium to high speed using wax paper, cellophane, foil or any heat-sealable material; automatic accumulator and bundler to overwrap 25 individual cartons in heavy, black kraft paper and then apply end labels to overwrap for identification, specially suited for small parts and small cartons that must be distributed in multiples of six, 12, 24 or more; also Compak machine and elevator lift that automatically forms a bag from roll stock, fills it with predetermined quantity and delivers completed package with each cycle of the machine.

[Continued on page 280]



No matter what shape you're in---Wrap-King will get around it

see *Wrap-King's*

LATEST MODEL IN OPERATION

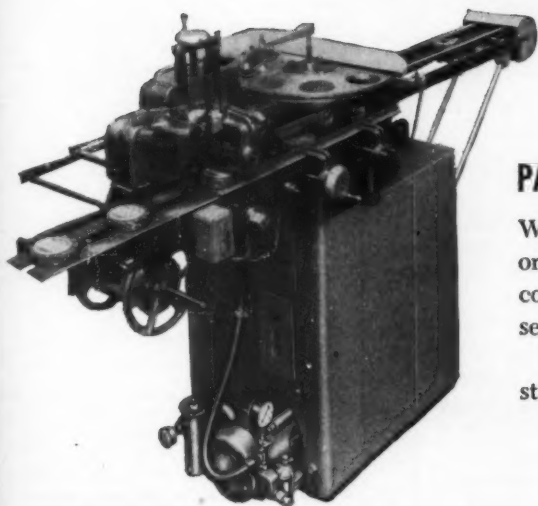
BOOTH 320

PACKAGE MACHINERY & MATERIALS EXPOSITION

Whether your products are round, disc, oblong, square or irregularly shaped, WRAP-KING equipment quickly converts to handle the shape and give you a perfectly sealed package, uniform in every way.

Hard, soft, sticky, brittle, WRAP-KING adapts instantly to all consistencies in products to be wrapped.

WRITE TODAY FOR FURTHER INFORMATION ON THIS
WONDER WRAPPING MACHINE



SALES AND SERVICE OFFICES IN HOLYOKE • CHICAGO • ST. LOUIS

Distributors

JAMES C. HALE & CO.
San Francisco, California
Los Angeles, California

VERNON H. CRAGGS, Inc.
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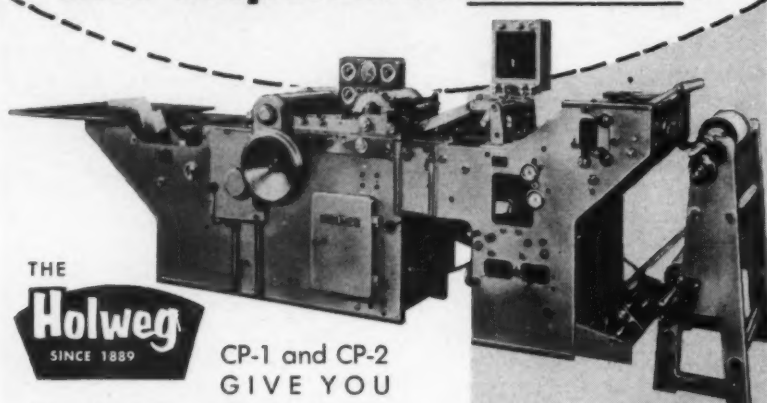
PACKAGING EQUIP. SERV., LTD.
Willowdale, Ontario

WRAP-KING CORPORATION

HOLYOKE, MASSACHUSETTS
A SUBSIDIARY OF CROMPTON & KNOWLES CORP.

CELLOPHANE BAG MACHINES

that outperform all others!



THE
Holweg
SINCE 1889

CP-1 and CP-2
GIVE YOU

MORE!

MORE NET PRODUCTION

The CP-1 and CP-2 produce the highest speeds attained on the American market today. This is real performance—not just a claim!

SPEEDS

CP-1: up to 500 per minute

CP-2: up to 350 per minute

MORE VERSATILITY

For size range; for simplicity of change-over; for multiplicity of bag types (see illustrations at right plus others not illustrated); these machines have no peer. Moreover, they possess the very significant advantage of making bags from poly-coated papers.

SIZE RANGES

CP-1: $1\frac{3}{8}$ "— $6\frac{3}{8}$ " widths;
 $1\frac{3}{8}$ "— $9\frac{7}{8}$ " lengths

CP-2: $2\frac{3}{8}$ "— $12\frac{3}{8}$ " widths;
5"—23" lengths

MORE QUALITY

The excellence of the finished product in all types produced is of such uniformly high caliber as can only be described as "the ultimate in the art of bagmaking."

MORE YEARS OF SERVICE

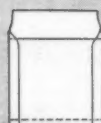
Machines so beautifully made they are almost maintenance free. Constructed to the most rigid precision standards to sustain high speed performance throughout heavy production schedules.

Your specific comparison is invited. Come and see the effortless performance of these wonderful machines at our N. Y. Demonstration Room. Write or call for appointment.

Heat Seals!
Glue Seals!



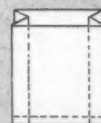
DUPLEX
BAGS



ENVELOPE
BAGS



FLAT
BAGS



SQUARE
BAGS



WIDE OR CONVENTIONAL
THUMB NOTCH BAGS



COMBINATION SINGLE & DOUBLE
& PANEL BAGS BOTTOM FOLD
BAGS

Holweg DIVISION
CONAPAC
CORPORATION
120 EAST 13th STREET, NEW YORK 3, N. Y.

HOBBS MFG. CO. Booth 308. Montage with color transparencies of installations of various company machines; main picture is of Hobbs slitter and rewinder with Alquist tension control. *Personnel:* S. F. Oakes, G. B. Clay, G. E. Mansfield, H. K. Lambert, R. D. Albertson. *Hotel:* Cleveland.

HOPE MACHINE CO. Booth 313. New-type 15MS semi-automatic single-piston unit; 19S two-line automatic filler; also four-line Type 19A, completely automatic high-production unit with infeed and discharge conveyors. *Personnel:* L. H. Hill, L. H. Kinsley, J. F. Barry, C. L. McLaughlin. *Hotel:* Cleveland.

HORIX MFG. CO. Booth 316. Exhibit of new bottom-fill automatic rotary filler offering protection for delicate products against aeration or oxidation. *Personnel:* Mrs. F. B. Fairbanks, W. H. Bulcao, J. L. Scanlon, R. Reno, R. McWilliam. *Hotel:* Cleveland.

INTERNATIONAL STAPLE & MACHINE CO. Booth 610. Exhibit of the new Clincher, a one-handed carton stapler; Dual Stapler, new top and bottom stapler; End Stapler, new carton stapler for partial and full overlaps; Air Boxer, new portable air stapler. *Personnel:* J. R. Arthur. *Hotel:* Cleveland.

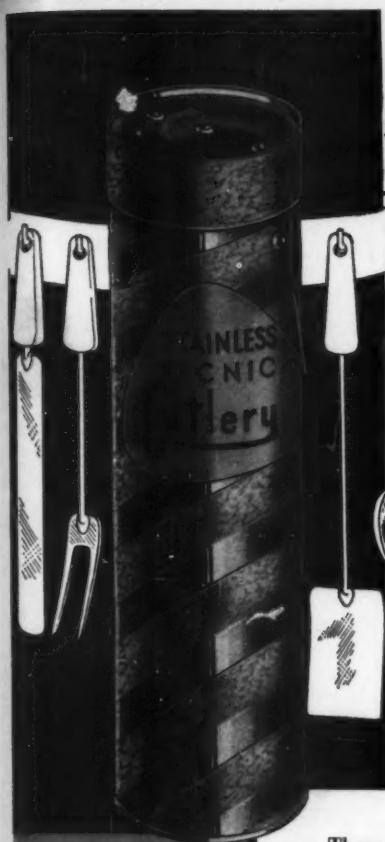
ISLAND EQUIPMENT CORP. Booth 512. Operation of Styl-O-Vac automatic carton unloader opening flaps of cartons as they proceed from a conveyor line, indexing carton over a vacuum lifting head which descends and lifts all containers out of carton and rotates at 90 deg. to deposit containers on infeed of Sty-O-Matic Walkie-Pushie high-speed unscrambler, then proceeding from the discharge of the unscrambler on Styl-O-Matic Rex chain conveyor to a Styl-O-Matic rotary accumulating table. *Personnel:* J. W. Stiles, N. W. Gross, W. Grilli, A. J. LoCascio, H. R. Frankle, E. A. Stiles. *Hotel:* Cleveland.

IVERS-LEE CO. Booth 305. Technical representatives and personnel on hand to discuss unit-packaging problems. *Personnel:* L. I. Volckening, J. R. O'Meara, J. P. Measday, R. W. Miller, W. Battistella, J. Creighton, B. N. Dwor. *Hotel:* Cleveland.

JONES, R. A., & CO. Booth 425. Constant-motion cartoner Model CMC #300 for handling bottles, tubes and similar articles at speeds of 300 per minute and up. Also semi-automatic CMV (Constant Motion Vertical) cartoners. *Personnel:* Messrs. Motch, Dieter, Jones and Deering. *Hotel:* Statler.

KVP CO. Booth 651. Exhibit of 550 packages representing 183 food manufacturers, using latest developments in flexible paper protective overwraps and paper-foil combination overwraps. *Personnel:* A. Weston, M. Wood, C. Mack. *Hotel:* Auditorium.

[Continued on page 282]



CLEVELAND CONTAINERS

are *Attractive* and USEFUL

They have eye appeal and provide product protection at low cost. Illustrated are containers of unusual design and construction.

The attractive cutlery container, shown above, has a colorful exterior and shining metal ends. Sturdy wall construction assures long usage. After serving as a package for cutlery, it becomes a convenient knitting carry-all. Reinforced eyelets in the top prevent the yarn from snagging.

Functionally designed, the unique weiner fork container, at the left, also has a dual purpose. With a simple pumping motion, this telescoping fork package can be used as a bellows in starting your barbecue fire.

Special purpose packages are a matter of course to our engineers. Sifters, shakers, pouring spouts . . . choice of liners . . . labels or wrappers . . . are available to meet any particular problem.

Why pay more? For good quality . . . call CLEVELAND!

These two containers each serve a dual purpose.

Write for a copy of our Packaging Brochure.

INVESTIGATE THE
Complete Line
of CLEVELAND CONTAINERS



THE
CLEVELAND CONTAINER
COMPANY

6201 BARBERTON AVE., CLEVELAND 2, OHIO

PLANTS AND SALES OFFICES:
CLEVELAND
DETROIT
CHICAGO
MEMPHIS
LOS ANGELES
PLYMOUTH, WIS.
JAMESBURG, N. J.
OGDENSBURG, N. Y.

ABRASIVE DIVISION:
CLEVELAND

SALES OFFICES:
NEW YORK CITY
WASHINGTON, D. C.
ROCHESTER, N. Y.
WEST HARTFORD, CONN.

Plants & Sales Offices:
TORONTO AND PRESCOTT, ONT.

Sales Office:
MONTREAL

• ALL-FIBRE CANS • COMBINATION METAL AND PAPER CANS • SPIRALLY WOUND TUBES AND CORES FOR ALL PURPOSES

CLEVELAND CONTAINER CANADA, LTD.



Your product is never out of sight . . .

when it's packaged in a glamorous Colonial re-use plastic box.

Select the most suitable size and shape from Colonial's extensive line of stock boxes—many of them with compartments—and cash in on the increased eye appeal of transparent packaging. There's a bonus benefit, too. Rugged, handsome construction gives these Colonial boxes high re-use value as general utility receptacles.

Low priced—because boxes are made from molds already on hand.

And if you don't find the particular box for your product, Colonial will design and produce a custom box to suit your needs.

Write for folder listing the complete line of Colonial stock boxes.



- Twist-snap catch holds lid snugly and securely closed.
- Snap-in hinges allow cover to open freely and fully.

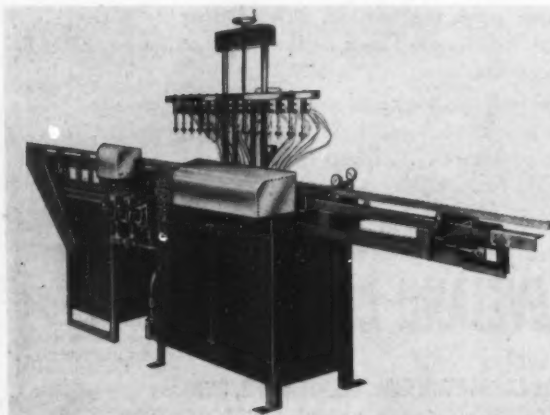
COLONIAL MOULDED PLASTICS

COMPANY, INC.

WILKINSONVILLE, MASSACHUSETTS

P A C K E R

offers a new **FULLY AUTOMATIC**
STRAIGHT LINE FILLER



Packer's new model PVA is pneumatically operated, electrically controlled, vacuum and gravity liquid filling machine—designed to allow the simplest operation ever. Fills all types of foamy and still liquids, from fractional ounces to quarts and gallons. Needs only one operator.

PACKER HAS A MODERN MACHINE TO MEET ANY FILLING REQUIREMENTS OR PACKER WILL DESIGN ONE FOR YOU.

Model SFRT
Foamless Dripless Filler
SFRT fills foamy material foamlessly. No spillage . . . no drip! Handles containers up to 5 gallons.

Model PVN
Packer Pneumatic Filler
The virtues of automatic filling without the high cost. Model PVN fills from fractional ounces to gallons.

Model PJI
Vacuum Fillers
The PJ series of vacuum fillers. 4-12 spouts; Push button control; rolls on casters. Modified versions to meet every need.

Send for detailed descriptions and prices

PACKER Machinery Corp., 30 Irving Place, New York 3, N.Y.

GRamercy 5-8223

KINGSBURY & DAVIS DIV., Food Machinery & Chemical Corp. Booth 201. Joint exhibit with Stokes & Smith Co. featuring K&D Model "LS" thermoplastic quad stayer with corner cutter attachment. *Personnel:* P. D. Bell, W. Andresen, F. Hastings, F. Roberts. *Hotel:* Cleveland.

LAKSO CO., INC. Booth 411. Exhibit of new Model 52 cottoning machine; operating inline, a Model 48 tablet counter; Model 52 cottoning machine, automatic bottle feeder and indexing conveyor; also table-model sampler tablet and capsule counter and Model 44 tablet inspection machine. *Personnel:* E. Lakso, R. Zeidler, Chandler, G. Lakso, R. Hendrickson. *Hotel:* Cleveland.

LYNCH CORP. Booth 314. New Lynch Robo-Lift, Robo-Wrap and Wrap-O-Matic Model PB machines on display. *Personnel:* A. V. Petersen, E. E. Hallander, T. C. Werbe, L. L. Campbell, R. E. Taggart, R. D. Ammend, B. J. Scholl, M. J. Czarniecki, Jr., C. B. Pierce. *Hotel:* Cleveland.

MRM CO., INC. Booth 306. Exhibit of new rotary labeling machine that affixes any size or shape label up to 6 by 8 in. on container sizes from fractional ounces to gallons without any change of parts except a starfeeder; fully automatic "Uni-Matic" labeling machine to handle both gluing and thermoplastic labeling operations which adjust to all sizes and shapes of labels and containers from ounces to gallons; fully automatic 12-spout filling machine for high-speed filling of all types of foamy and still liquids with instant adjustment for lowering or raising entire nozzle head to accommodate containers of various heights and to fill all size and shape containers from ounces to a gallon; also semi-automatic filling machine with automatic conveyor, Model MR-12, with 6 to 12 spouts. *Personnel:* H. D. Manas, R. J. Dealy, R. Mishkin, F. Rossetti, R. Manas, R. Siegle. *Hotel:* Cleveland.

MANHATTAN PASTE & GLUE CO., INC. Booth 214. Illuminated display featuring customer products using Manhattan adhesives. *Personnel:* A. Lawrence, S. W. Flaschen, S. Eitelberg, K. Schwab. *Hotel:* Statler.

MARKEM MACHINE CO. Booth 307. Industrial marking machines on display. *Personnel:* S. W. Raymond, R. C. Mensel, D. C. Emery, J. Lyon. *Hotel:* Cleveland.

MARSH STENCIL MACHINE CO. Booth 513. Exhibit of manual and electric stencil-cutting machines; stencil supplies—inks, brushes, etc.; electric Dial-Taper and Twin-Taper tape dispensers. *Personnel:* E. J. Marsh, J. Krause, C. Rantz, T. Morgan, L. Magas. *Hotel:* Auditorium.

MERCURY HEAT SEALING EQUIP-

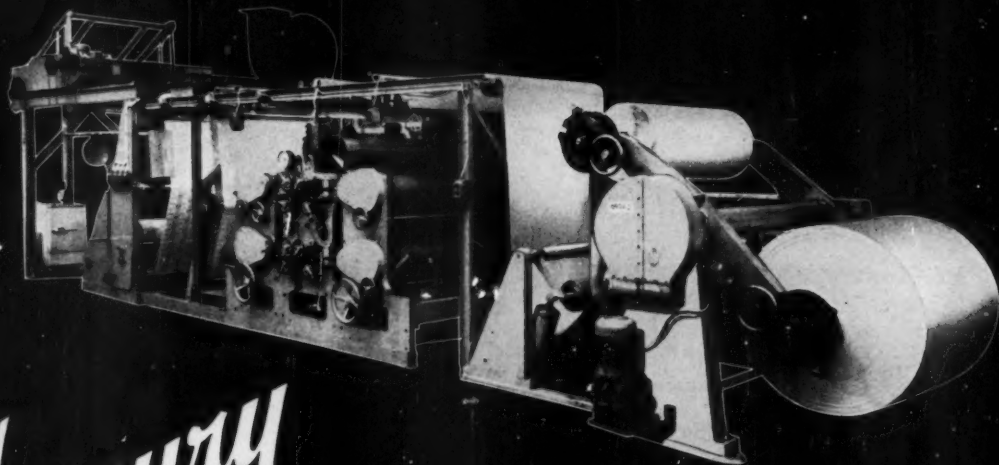


SINCE 1933

*A Symbol of fine
CRAFTSMANSHIP*

MERCURY MACHINES—PACESETTERS FOR THE FOLDING CARTON INDUSTRY

INTRODUCING AN IMPROVED CONCEPT OF PRINTING CELLOPHANE, FILM and PAPER



Mercury

MILTON 4-COLOR PRINTING PRESS

PRESS ILLUSTRATED PROVIDES:

Printing width 49-inch maximum.

Printing repeat, 12½-inch minimum,
24½-inch maximum.

Running register control at full press
speed.

Complete with:

- Dryers
- Stock roll stand
- Rewinder
- All motors and controls

Available in a variety of sizes and
number of colors.

We will be pleased to mail detailed
information on the above printer, or
have our representative visit with
you at your convenience.

Revolutionary rubber plate printing press . . . for
papers, films and foils. Letterpress quality with rub-
ber plates.

Patented "Ink Mill" fountain and transfer permits use
of high viscosity flexographic and letterpress type inks.

The first and only web fed press to reproduce the
quality built into the rubber plate.

Printing to suit your customers' requirements on the
lightest of transparent films, foils or papers.

Roll to roll at four to five hundred feet per minute.
Available in a variety of sizes, with web slitters,
sheeters or rewinders.

**Profit Producing Machinery
for Paper Convertors**

MERCURY
ENGINEERING CORPORATION

2100 NORTH FARWELL AVENUE
MILWAUKEE 2, WISCONSIN, U. S. A.

Because
you're proud
of your
product!

- BEAUTIFY . . . PROTECT . . . PROMOTE!
- CRYSTAL CLEAR VISIBILITY STIMULATES IMPULSE SALES
- ATTRACTIVE RE-USE FEATURES

Complete product protection . . . safe for foods, dairy products and hundreds of other packaged items.

Patented vapor-proof double seal locks in flavor and freshness.

Designed for use on automatic filling, dispensing and capping equipment. Light weight, compact nesting solve inventory and handling problems.

Investigate Flexeel now for your product. Stock shapes and sizes or custom design for your needs.

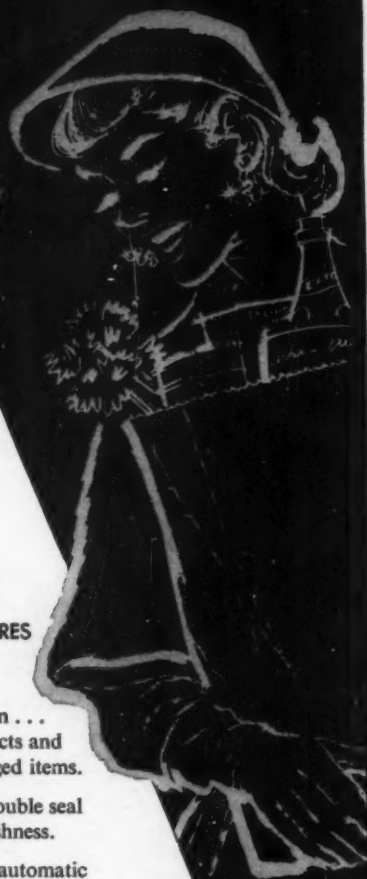
Write for Flexeel* Facts Bulletin

*Trademark of BUCKEYE MOLDING COMPANY
211 S. Third St. Miamisburg, Ohio

All Flexeel closures and containers covered
by U. S. Pat. No. 2,614,727 and
Canadian Pat. No. 491,813.



LEAKPROOF
Flexeel *
PLASTIC CONTAINERS



MENT CO. Booth 500. Display of Verti-Pak machines. Personnel: O. May, J. Dreeben, L. Black. Hotel: Statler.

MILLER WRAPPING & SEALING MACHINE CO. Booth 202. Exhibit of new Simplex Model 24-7S polyethylene bag maker for side-sealed bags without center seam; also new Corley-Miller Stor-Rap machine for wrapping trays of fresh meat, poultry, fish, vegetables or produce at store level; demonstration of Simplex Model 300 high-speed cellophane bag maker; Simplex Model 4-7 poly bag maker; Corley-Miller Kwik-Wrap machine; Amsco rotary and jaw-style sealers; Whiz-Packer volumetric and net-weight filling machines.

MILPRINT, INC. Booth 550. Large variety of packages displayed on self-service shelves representing many industries. Personnel: W. Heller, Sr., R. Ewens, A. Snapper, B. Hefter, R. Hanson, P. Hultkrans, L. Zimmerman, C. K. Billeb, W. Hullinger, W. Heller, Jr., R. Becker, G. Everitt, D. Davis, J. Heller, R. Lundberg, W. Hunter, H. Jones, J. Hardman, E. Hardman. Hotel: Statler.

MODERN PACKAGING. Booth 655. Exhibit of MODERN PACKAGING, Modern Packaging Encyclopedia, and other Breskin publications. Personnel: C. A. Breskin, A. S. Cole, P. Backstrom, M. Olsen, B. Gussow, R. C. Beggs, J. M. Connors, S. Siegel, L. Stouffer, P. Hagens, R. Slater, W. C. Simms. Hotel: Statler.

NATIONAL ADHESIVES, Div. National Starch Products, Inc. Booth 200. Display of specialty laminating adhesives; high-speed resins; also hot-melt applications. Personnel: F. Greenwall, D. Pascal, J. Dillon, S. F. Thune, W. Sederlund, R. C. McGaffin, C. Fazioli, R. L. Pett, J. C. Clay, B. C. Gordon, H. Kaufmann, F. L. Murphy, L. Klempner, G. Kaufmann, L. Balchunas, P. M. Gronendyke, S. Klausner, S. Gold, G. Stahl. Hotel: Statler.

NATIONAL EQUIPMENT CORP. Booth 661. Personnel: S. Greenberg, W. H. Kopp, M. M. Guggenheim, O. Frank, C. H. Greenberg.

NEW JERSEY ELECTRONIC CO. Booth 523. Exhibit of Poly-ette bag-making machine with photo registration control for making bags out of pre-printed polyethylene tubing; also several models of photo registration controls and several custom-made machine control panels. Personnel: G. R. Hair, J. V. Anton. Hotel: Hollenden.

NEW JERSEY MACHINE CORP. Booth 406. Operation of Pony Model 165 fully automatic glue labeler for speeds up to 165 bottles per minute with non-stop bottle motion, circulating glue system, vacuum label handling and

MENNEN MAKES BOTTLING EASY-

with PNEUMATIC machines

"made for each other"

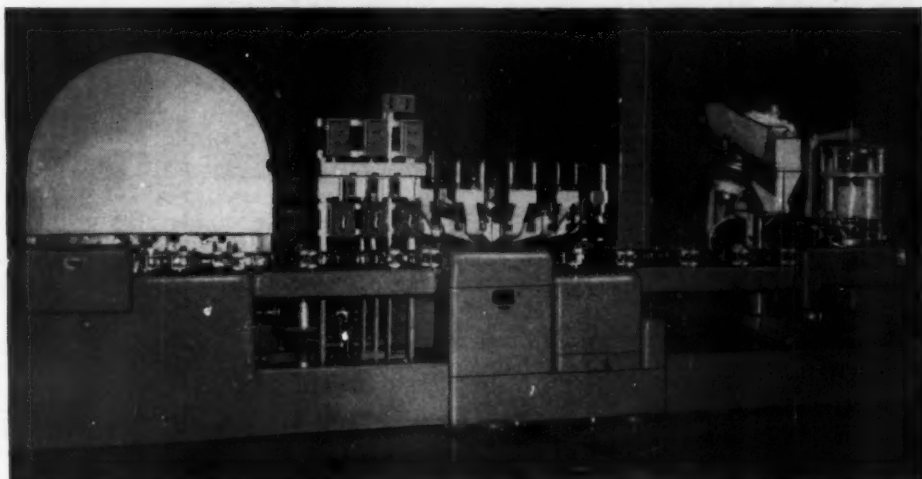


WHAT MENNEN's got is close to automation — a conveyor synchronized Pneumatic bottle cleaner, filler and capper! Capable of handling open-mouth as well as all glass sprinkler top bottles and the most delicately molded closures, it terminates in a fully automatic labeler capable of front and back simultaneous application.

and this tension is maintained in day in and day out production.

The filler will fill light and heavy liquids equally well, alcoholic as well as oil base. It is designed for quick and thorough cleaning between fills on different products.

All of the equipment is designed to "go together" in a balanced, highly efficient, high



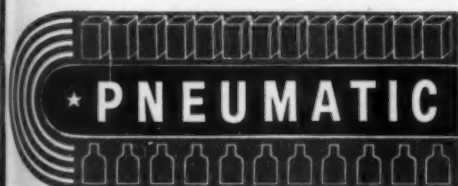
A synchronous drive keeps the three machines, cleaner, filler and capper "in step" and in exact synchronism. The bottles pass from cleaner to filler and filler to capper without a hitch, and on spaced centers beyond the cleaner discharge.

Rounds, rectangles, or oval bottle sections are handled with ease. The capper is equipped with Sterling Cap Feeder especially designed for positive feeding without ever a possibility of breaking or marring.

The capping machine is equipped with sensitive chucks pre-set to any desired tension

productive rate unit. The brilliantly cleaned containers are exactly filled to the same height without dripping or messy spillage, screw caps are accurately and positively applied and the labels beautifully adhered to the containers without muss or misregistration. We'll gladly mail technical bulletins on any or all of this equipment — just write.

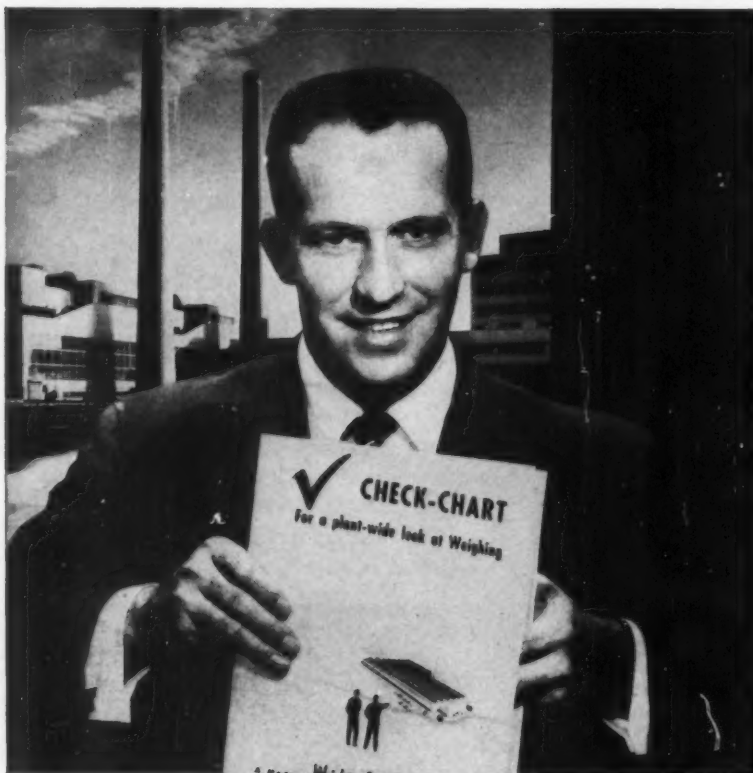
PNEUMATIC SCALE CORP., LTD., 82 Newport Ave., Quincy 71, Mass. Also: New York; Chicago; Dallas; San Francisco; Los Angeles; Seattle; Leeds, England. Canadian Division: Delamere & Williams Company, Ltd., Toronto.



Packaging and Bottling Equipment



PACKAGING INSTITUTE'S 18TH ANNUAL FORUM
Sept. 10-12, 1956. Hotel Statler, Cleveland, Ohio



**"This Scale Check Chart showed us
how to get Better Cost Control"**

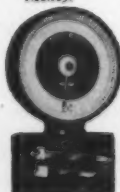
*** *It's New* from **TOLEDO**—
send for yours today!**

Your scales are a vital element in effective cost and quality control. Errors in weighing go all the way through accounting and affect cost . . . profit . . . or loss! You need to look at *all* your weighing today . . . not as isolated scales, but as a *weighing system*.

Toledo's new Scale Check Chart will show you quickly and accurately how well your scales are serving you, and provide the information you need for truly effective cost control.

This new Check Chart is yours for the asking in a handy kit that contains all you need for an easy, informative appraisal of weighing in your plant. Send for it today. Address Toledo Scale Company, 1410 Telegraph Rd., Toledo 1, Ohio.

*On Your Scales...
Material Becomes
Money!*



TOLEDO®
HEADQUARTERS FOR SCALES

compact floor-plan arrangement; Pony Express fully automatic labeler for speeds up to 65 bottles per minute featuring vacuum label handling, circulating glue system and simple change-over; Pony Express fully automatic labeler for applying back and front labels simultaneously at speeds up to 65 per minute; Pony Labelrite for hand-fed operation featuring simultaneous application of label to bottle and code imprinting of label in cycle; also Jersey Quad, Model 193, quad-staying machine for manufacture of set-up paper boxes. *Personnel:* G. vonHofe, D. Wellbrock, A. Schaefer, K. Neimeier, M. Smith, B. Droge, J. Brown, B. Gold. *Hotel:* Cleveland.

OLIN FILM DIV. *Registration Area.* Operation of a message and information center on cellophane and polyethylene, for convenience of show personnel. *Personnel:* A. T. Safford, Jr., E. L. Holloway, G. R. Johnson, G. W. McCleary, J. C. Mertes, C. W. Ellis, J. B. Pritchett, V. L. McNeel, R. J. Kautz, B. H. Heim, E. B. Buck.

PACKAGE MACHINERY CO. *Booth 102.* Exhibit of new high-speed "Versa-flow-400" machine and special Model "B" version of original Transwrap. *Personnel:* R. L. Putnam, D. M. Talbot, L. A. Curtis, H. Mosedale, R. L. Putnam, Jr., F. Crescenzo, W. Happe, R. Labine, F. Gross, D. Barkman, J. Chalfant, J. Garrett, W. Keil, T. Jefferson, L. Evans, E. Hjelm, W. Rangnow, W. Maybury, D. Hoskins, H. Schoener, R. Oriol. *Hotel:* Cleveland.

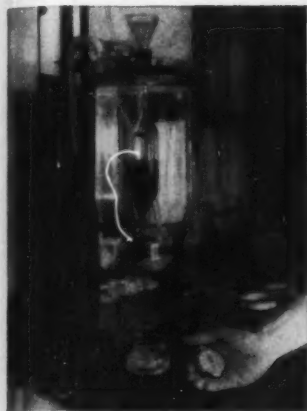
PACKAGING PARADE. *Booth 101.* *Personnel:* M. Haywood, Jr., M. O. Pottlitz, C. Fitzgerald, T. Rickard, C. S. Abbott, G. O. Manypenny, L. R. Bergstrom, M. R. O'Hara, T. Pyrch, J. Willcox, D. McCammon, F. C. Goodrich. *Hotel:* Statler.

PAISLEY PRODUCTS, INC., Div. of Morningstar, Nicol, Inc. *Booth 617.* Four display panels portraying typical gluing applications in the packaging industry and samples of completed packages on exhibit; technical application engineers and adhesive chemists on hand to assist visitors; also literature available. *Personnel:* G. J. Muller, E. Bearman, I. G. Nichol, E. C. Lenz, H. R. Callahan, M. Stempel, Sr., S. Schuller, D. Bookshester, M. Stempel, Jr., C. Leggett, E. Miller, P. Becker, W. Kennedy. *Hotel:* Cleveland.

PAK-RAPID, INC. *Booth 416.* Exhibit of packaging machine equipped with semi-automatic feed, a printing unit for automatically identifying each package and attachment for automatically removing air from packages as made. *Personnel:* J. Irvine, B. Karpowicz. *Hotel:* Auditorium.

PALMER SUPPLIES CO. *Booth 301.* Display of products from Culligan, Inc., Western Coatings Co., Kordite Co., Vul-

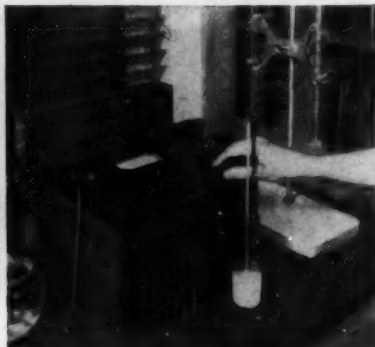
Paisley's Scientific Controls Assure Top Quality Adhesives.. *ALWAYS!*



Determining absolute viscosity with water-jacketed viscosity pipet.



Scientific methods and equipment give absolute control of production in Paisley plants.



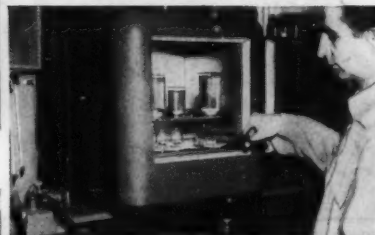
Determining the pH of a dextrine with glass electrode potentiometer to control uniformity.



Brabender viscometer gives permanent record of viscosity characteristics of raw materials.



Modern laboratories and skilled Adhesive Engineers serve Paisley customers from coast-to-coast.



Thermostatically controlled drying oven testing high purity of raw materials.



Specimen of every batch is laboratory tested to maintain rigid quality standards.



Laboratory coating device for testing coverage of Paisley Adhesives.

YOUR HEADQUARTERS FOR GLUES, PASTES, RESIN EMULSIONS, LATEX CEMENTS AND RELATED CHEMICAL PRODUCTS FOR ALL PACKAGING, LABELING AND INDUSTRIAL MANUFACTURING OPERATIONS.

HOW TO GET THE ONE BEST ADHESIVE FOR THE JOB!

Paisley Scientific Adhesive Service is nation wide. Plants and warehouses stretch from coast-to-coast. Here, modern Laboratories and skilled engineers develop Adhesives for every purpose, to a degree of perfection beyond anything you ever thought possible! All raw materials known to the science of Adhesion are used. ★ Write today for our "ADHESIVE OPERATION DATA SHEET." Return it with information asked for. Paisley experts will study your needs and recommend the ONE best and most economical Adhesive for the operation you describe. Trial shipment on approval if wanted. Here's the SURE... the modern way to buy Adhesives.

PLANTS: NEW YORK • CHICAGO • ST. LOUIS • LOS ANGELES • SAN FRANCISCO



**MAIL THE
COUPON
FOR FREE
DATA
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Send me your Adhesive Operation Data Sheet and catalog of your product line.

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A product can change its appeal
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improving on the packaging.

The next time you want
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cellophane, paper and paper
board products . . . get in touch
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EXECUTIVE VICE PRESIDENT

This advertisement is addressed to an experienced general manager who is ready to step up into one of the major opportunities in industry.

Our company is a well known manufacturer of paper, paper board and related products. Our yearly sales now exceed \$150,000,000 and we are continuing to grow along sound lines. We have excellent manufacturing facilities located near key cities.

We are seeking a man qualified by experience to direct all phases of the operation of this company. Preferred age 40 to 55. We are planning a salary of approximately \$70,000 which will be supplemented by a liberal bonus and stock option arrangement.

Experience in such industries as building material, paper, lumber, plywood, wood pulp and other related fields will be most valuable.

Your reply will be treated in entire confidence and should include information about your present position, compensation, home address and telephone number. Interviews will be arranged at an early date in a convenient city.

Box 479, Modern Packaging
375 Madison Avenue, New York 22, N. Y.

CHEMIST [Packaging]

WHAT:

Position working with a wide variety of packaging materials, using extensive laboratory facilities and meeting major packaging suppliers.

WHY:

Expanding entire packaging operation.

WHERE:

New York Metropolitan area.

REQUIRED:

BS in Chemistry, Physics, or Chemical engineering.

DESIRED:

1-3 years experience in packaging.

WILL CONSIDER:

Recent graduates.

Please send resume including salary desired to

Box 482, Modern Packaging
575 Madison Ave., New York 22, N. Y.

can Container Corp. and Standard Collapsible Tube Co. *Personnel:* E. H. Gleason, A. Arff, A. Lalli, F. H. Palmer, F. Maher. *Hotel:* Auditorium.

PAPER CONVERTING MACHINE CO. *Booth 407.* Illustrations and production samples of fine process rubber-plate printing from six-color rubber-plate letterpress equipment; illustrations of six-color flexographic press, waxer, core machine, automatic rewinders, napkin machines and general line of paper converting equipment. *Personnel:* R. E. Small, T. C. Ketcham. *Hotel:* Cleveland.

PETERS MACHINERY CO. *Booths 211, 218.* Operation of Model GT double-row sandwiching machine making cookie sandwiches with cream at speeds up to 1,400 or more per minute; Model L-2 bag-sealing and header-applying machine automatically closing gusset-type cellophane bags filled with cookie sandwiches and applying header or labels at 70 or more per minute; SG carton and tray forming and gluing machine handling glue-type cartons at speeds up to 175 or more per minute; Model CCY-L carton folding and closing machine operating at speeds up to 120 or more per minute; also new Model UD cellophane sheeting and stacking machine. *Personnel:* H. L. Greene, B. C. Lewis, J. Boehler, R. F. Windstrup, G. K. Bahr. *Hotel:* Cleveland.

PNEUMATIC SCALE CORP., LTD. *Booth 304.* Demonstration of a new machine and an assortment of bottles and packages on display to illustrate operations performed on company machines. *Personnel:* N. S. Ross, S. R. Howard, W. E. Coughlin, G. J. Ross, H. H. Conklin, A. T. Buskens, R. W. Coughlin, H. Foster, R. H. Eiff, F. E. McIntosh, O. H. Hultin, D. W. Tiano, L. F. Blackwell, K. M. Peterson. *Hotel:* Cleveland.

POTDEVIN MACHINE CO. *Booth 663.* Exhibit of new Lock-N-Carry machine which produces handle bags for notion and department store trade as well as for millinery bags, envelope flap mailing bags for magazines and square shoe bags; Model 2R12 gluing, cementing and sheet-coating machine for applying delicate and accurate coating to sheets of various sizes and shapes; also Model MG 4-in. margin gluer for applying a strip of glue $\frac{1}{4}$ to 4 in. wide on edges of paper or rigid material. *Personnel:* J. H. Richmond, J. S. Hamilton, R. A. Potdevin, J. S. Hawkins, A. G. Miller, C. E. Duerr, J. Donohoe, W. Hamilton, S. Norton, O. Denton, C. Holmes, A. Holmes, G. Kirchner, H. E. Hummel. *Hotel:* Cleveland.

REDINGTON, F. B., CO. *Booth 106.* Operation of automatic carton forming, filling and closing machine; also samples of packages handled on company equipment. *Personnel:* C. L. Barr,

Here are the LOW-COST answers to YOUR labeling problems!

whatever you need...
EVERY LABELING will
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Avery pressure-sensitive Labeling offers you a new approach... an easier and *better* solution... wherever you need to code, identify, instruct, warn, route or inspect. It's the modern low-cost method of labeling to do the job quickly and efficiently. Avery Labels can be designed and produced in the exact size, shape and color you need... individually die-cut on sheets or rolls for manual or automatic labeling!

1. NO MOISTENING—EASY TO APPLY

One simple motion—a fingertip pressure—and Avery Labels are on in an instant—without moistening! No waste motions in handling or sorting loose labels—no messy gluing or wetting.

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Metal, plastic, glass, cellophane, metallic paper, pliofilm, polyethylene, ceramics, wood... and many other surfaces... are being easily and quickly labeled every day with Avery pressure-sensitive Labels.

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Will not pop, peel or curl even under extremes of temperature and humidity—even stay neat and attractive with rough handling.

4. SPEEDS PRODUCTION

In all industries... in hundreds of ways... Avery Labels are saving time, labor and money every day. Avery Labeling is geared to *your own* type of operation—either fast, production line speed or intermittent labeling.

5. THEY'RE PRICED RIGHT

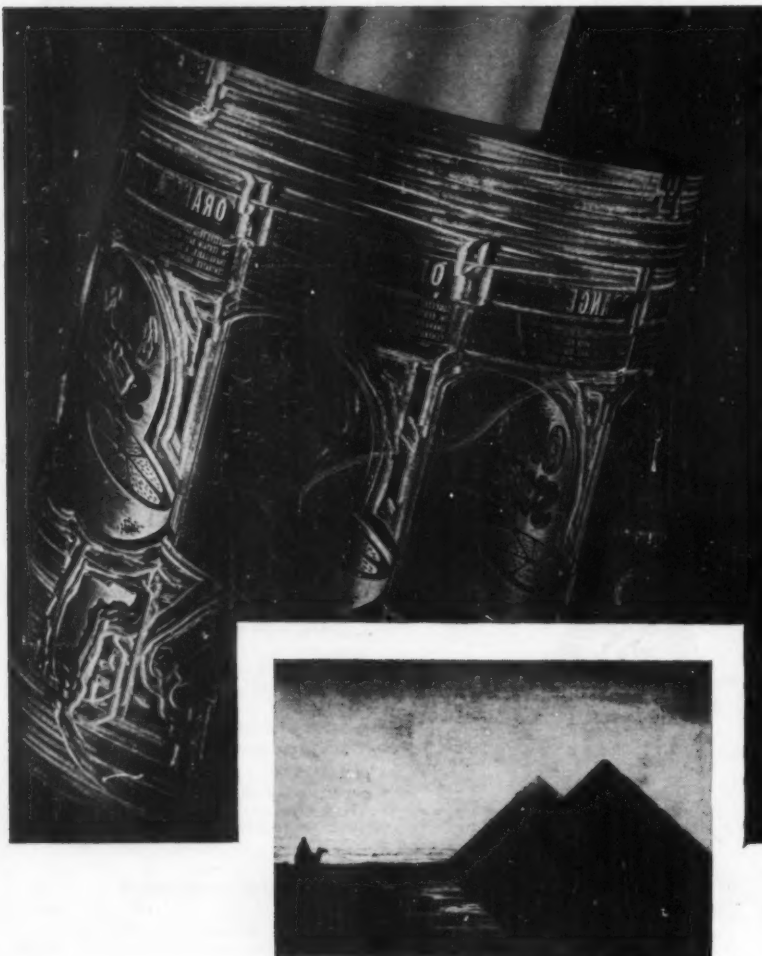
In terms of economy and improvement, actual case histories prove that Avery Labeling is the most economical method you can use in your production operations.

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City _____ Zone _____ State _____

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More and more packaging men are discovering that Steel Engraved Cylinders give them the printed package they are looking for. Converters are impressed with the way they out-last all other printing techniques, the fact that every impression is as perfect as the first, plus the many other quality and durability factors inherent in chrome-plated steel.

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Make your next impression a permanent one—make it a steel engraved cylinder by Vitra-Tone. Write today for prices and details.



E. A. Siebert, J. C. Hotton, W. F. Dent, K. C. Craig, J. W. Hoskins. Hotel: Cleveland.

RESINA AUTOMATIC MACHINERY CO., INC. Booth 721. Exhibit of RU-200 capping machine. Personnel: E. N. de Bastos, S. Resina, A. Weller. Hotel: Cleveland.

REYNOLDS METALS CO. Booth 309. Exhibit of all types of aluminum foil, gravure-printed packaging materials, as well as complete line of aluminum containers. Personnel: F. Liebert, P. Murphy, P. Dearborn, J. Chapman. Hotel: Statler.

ROTO WRAP MACHINE CORP., Div. Conapac Corp. Booth 212. Exhibit of new fully automatic coin and token packaging machine which counts and packages a predetermined number of tokens into a four-side, heat-sealed package; also Polyette, new high-speed machine for manufacturing bags from polyethylene tubing with new forming arrangement to permit manufacture of side-sealed pouches from sheeting as well as regular bags from tubing. Personnel: F. L. Walton, R. H. Schnoor, J. H. Brezinski, A. Gans, A. Moravec, R. McClosky, E. E. Miranda, J. Fields, K. Fritts, F. diFranco, R. J. LaPierre, J. H. Beckman. Hotel: Hollenden.

SCANDIA MFG. CO. Booth 312. New Model "100" fully automatic multiple wrapping, banding and bundling machine on display. Personnel: W. B. Bronander, Jr., E. N. Brooks, D. DeLoca, L. Maguire, I. M. Menner, A. H. DeWitt. Hotel: Cleveland.

SCHOOLER MFG CO. Booth 222. Personnel: J. T. Schooler, W. McCambridge, F. Eckert, J. Madden. Hotel: Cleveland.

SIMPLEX PACKAGING MACHINERY DIV., Food Machinery & Chemical Corp. Booth 202. Exhibit of Model #300 high-speed cellophane bag-making machine; also new developments in polyethylene bag making. Personnel: A. J. Olsen, J. D. Hoffman, M. W. Smith, D. A. White. Hotel: Cleveland.

STANDARD-KNAPP DIV., Emhart Mfg. Co. Booth 422. Personnel: Messrs. Cressy, Mosley, Holstebro, Kniffin, Johnson, Shields, Kobick, Lampke. Hotel: Hollenden.

STEIN, HALL & CO., INC. Booths 601. Comprehensive line of adhesives for all types of packaging on display; variety of products incorporating adhesives, such as paper cups, paper boxes, etc.; also number of well-known brand packages for which Stein Hall adhesives are used in forming, sealing, wrapping and labeling. Personnel: D. H. Lipman, R. Shoals, R. Selner, C. D. Nevin, M.

205

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**MEET
US AT BOOTH**

205



**PACKAGING MACHINERY & MATERIALS EXPOSITION
CLEVELAND, OHIO SEPTEMBER 11-14**

**WRIGHT MACHINERY
COMPANY**

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THE BOX THAT SAYS "BUY ME"



Just when the customer is in a buying mood, the product container is often the only salesman. Does your box close the sale by saying "Buy me"? An attractive, informative Gaylord box catches the prospect's eye...gives him convincing reasons why he should invest his money in your product.

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Stettner, B. Shoals, B. Weiser, B. Hahn, H. Mitchel. *Hotel: Statler.*

STOKES & SMITH CO., Sub. of FMC. *Booth 201.* Joint display with Kingsbury & Davis Div. featuring "EH" Neverstop high-speed carton filler and sealer; "Sure-Way" package caser and "SIG" automatic foiling machine. *Personnel:* W. R. Huguenin, J. R. Sonneborn, S. T. Brinton, R. C. Smith, Jr., W. Buswell, D. Straw, W. Clough, J. K. Holland, C. Robbins, L. Glancy. *Hotel: Cleveland.*

SWIFT & CO., Adhesive Products Dept. *Booth 516.* Adhesives designed and tested for numerous packaging operations performed by packaging machinery on display. *Personnel:* E. A. Moss, E. R. Paul, S. E. Carroll, C. S. Young, W. W. Truxes, A. W. Boyd, C. F. Patterson, W. R. Johnson, E. P. McGuire, C. W. McHaffie, C. W. Werner, D. D. Roberds, J. F. Samwebber, J. P. McGlinn, C. E. Smith. *Hotel: Statler.*

TOLEDO SCALE CO. *Booth 613.* Demonstration of automatic carton-weight classifier for checking cases, cartons and containers to determine if filled containers are within predetermined weight tolerance, equipped with adjustable photo-electric controls; new large food waste disposers up to 5 HP and new label imprinter; also representative models of complete line of industrial weighing equipment for packaging and production operations. *Personnel:* M. W. Mengel, G. H. Webb, W. L. Wise, C. H. Cadwallader, L. R. Hummel, R. A. Rader. *Hotel: Manger.*

TRIANGLE PACKAGE MACHINERY CO. *Booth 429.* Exhibit of Model L-1 automatic bag making, filling and sealing machine for dry products; Model DS-1 automatic single-line filler for cottage cheese, ice cream, salads, etc. *Personnel:* L. R. Muskat, P. Muskat, W. P. Muskat, R. L. Murkat, J. DuMolin, D. R. MacDonald, W. F. Aull, Jr., F. E. Ullman. *Hotel: Cleveland.*

UNITED SHOE MACHINERY CORP. *Booth 555.* Demonstration of new type of adhesive called Thermogrip which comes in cord-like form, coiled on reels and can be attached to packaging, processing and converting machines to feed, melt and apply the adhesive at point of bond formation; also Box-master machine for in-plant production of glued-up boxes from die-cut blanks. *Personnel:* R. M. Lloyd, G. V. Upton, E. F. Teel, R. K. Sprague, D. C. Smith, C. P. Losh. *Hotel: Manger.*

U. S. AUTOMATIC BOX MACHINERY CO., INC. *Booth 105.* Exhibit of automatic tablet counting and filling machines for filling tablets into bottles. *Personnel:* O. W. Wikstrom, O. W. Wikstrom, Jr., A. C. Wikstrom, O. E. Cote, G. H. Nilsen, A. Melzer, C. C. Fasch, O. L. Weidmann, C. Fago, C. Willingham. *Hotel: Cleveland.*

U. S. BOTTLERS MACHINERY CO. *Booth 520.* New model DC-12 Sanitair



styrene **CAMPCO** sheet
for light, strong, colorful
vacuum-formed packaging...

Vacuum-formed from high-gloss CAMPCO styrene sheet, this L. M. Cox Manufacturing Co. display package makes a good product more attractive... holds it snugly... keeps hands off... protects the product from shipping damage. The individually fitted wells eliminate cardboard spacers — clearly display every piece.

CAMPCO is strong, light in weight, and ideal for vacuum-forming. It comes in many colors... is easy to paint, print, or emboss... available in mat or glossy finish. But most important, it is inexpensive — made to order for the cost savings of vacuum forming.

You'll be delighted with the soft, lustrous beauty of this material. It can add sales appeal to any product. Write for free samples.

CAMPCO Division of Chicago Molded Products Corporation
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☐ Please send data on CAMPCO sheet

☐ Please send sample. Width _____, length _____

Name _____

Company _____

Address _____

City _____

Zone _____

State _____

If it's a question of

speed



Illustrated is a Battle Creek Model 51, precision engineered to handle packages $3\frac{1}{2}$ to $5\frac{1}{4}$ " long (alternately 6 to 8" long), $2\frac{3}{4}$ to 4" wide and $\frac{3}{4}$ to 2" high, at speeds up to 180 per minute.

Battle Creek Continuous Flow® machines wrap from 60 to 180 packages a minute . . . with a choice of Cellophane, wax coated papers, foil laminations, and other self-sealing papers in economical roll form. Battle Creek's careful engineering gives you efficient, high speed performance and package handling at lowest cost, with electronically accurate registration of the printed overwrap at any speed.

LET US WRAP YOUR PRODUCT. Send us samples of your products (or if they are perishable, describe the packages and sizes) and tell us the kind of overwrapping you require. We will either wrap and return them promptly with our recommendations, or give you our best suggestions in answer to your inquiry. If you have specific questions, we would welcome a letter from you.

"Continuous Flow" Packaging

We would like to meet you at the Packaging Machinery and Materials Exposition, Sept. 11-14, Cleveland Public Auditorium, BOOTH 116.

BATTLE CREEK
packaging machines, inc.

102 TWELFTH STREET, BATTLE CREEK, MICHIGAN



high-speed rotary air cleaner, adaptable to handle containers of $\frac{1}{2}$ -oz. capacity to 4-in. diameter at speeds of 125 to 250 containers per minute. *Personnel:* I. H. Risser, C. R. Otters, R. G. Hill, A. G. Hornney, C. H. Turner, H. W. Clowe, C. Symon, C. C. Bruder, G. Warlow. *Hotel:* Cleveland.

VERTROD CORP. Booth 418. Display of thermal impulse heat sealers for all thermoplastic films in hand, foot-pedal and pneumatic models; demonstrations of seals and trim seals in polyethylene through wrinkles, gussets, liquids and powders. *Personnel:* A. Fener, S. Fener. *Hotel:* Cleveland.

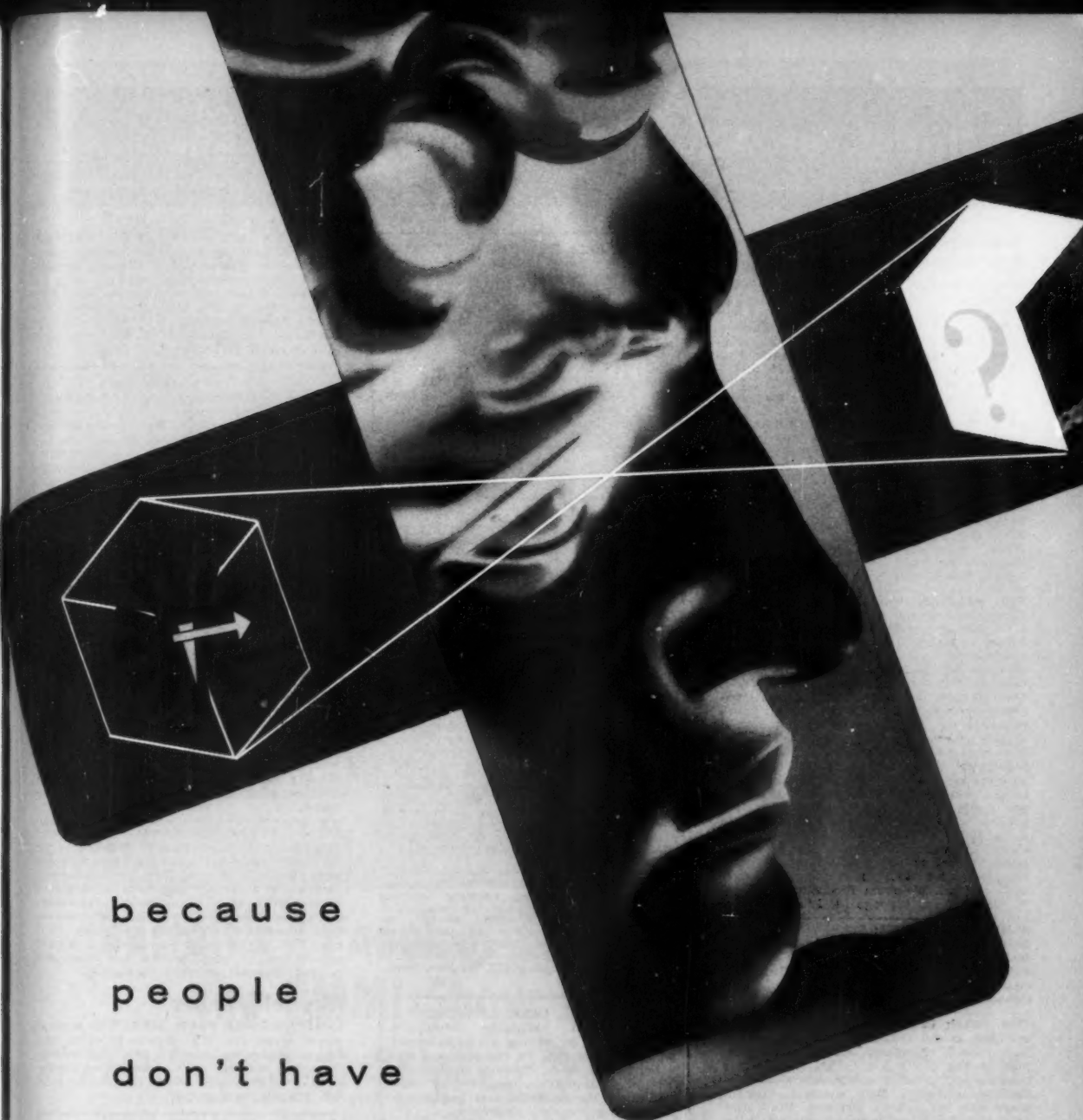
WEBER, H. G., & CO., INC. Booth 404. Exhibit of unwind roll-stand equipment with tensioning and edge alignment; automatic constant tension for electrically unloading any electro-magnetic brake system to maintain an automatic constant tension on web in winding or unwinding operations; sensing unit-web edge sensing; corrugator tear-strip applicator; also jumbo photographs of various types of installations covering paper-bag machines of various types. *Personnel:* H. W. Weber, F. Lubeley, R. Beninger. *Hotel:* Cleveland.

WOODMAN CO., INC. Booth 403. Exhibit of Plura-Matic net weigher with multiple scale units; Air-Weigh-Matic automatic bag pick-up with built-in heat sealer; Rotary Pak-Off accumulating table; also Model "56" Klo-Seal-Klo-Stitch closing machine. *Personnel:* D. E. Woodman, J. L. Kelley, N. R. Henry, J. L. Moore, D. C. Adams, J. Ashworth, P. Parker, H. Wood, L. Gill, B. Fant. *Hotel:* Cleveland.

WRAP-ADE MACHINE CO., INC. Booth 324. Exhibit of Pneumatic sealer and unit packaging machine. *Personnel:* A. M. Powell, R. F. Freebody. *Hotel:* Cleveland.

WRAP-KING CORP. Booth 320. Display of Model LF frankfurt wrapper for overwrapping $\frac{1}{2}$ - and 1-lb. packages of frankfurts in cellophane, Pliofilm, polyethylene and saran with or without use of a base board or tray-lock sleeve or tray-type container, sleeves or trays at speeds from 30 to 80 packages per minute. *Personnel:* W. W. Anthony, Jr., J. F. Belcamino, T. E. Dombroski, F. W. Howe, Jr., L. Lakey, E. T. Melle, R. T. Nathan, C. P. Ouellette, V. H. Ouellette. *Hotel:* Cleveland.

WRIGHT MACHINERY CO. Booth 205. Exhibit of the Bag Master System-Model "H" consisting of "H" weigher, the bag applicator and the bag transfer, all integrated and timed to operate as a single unit to provide completely automatic system for packaging food and other products of light per cubic bulk in cellophane, wax, glassine or foil; the 2SG automatic cartoning and weighing system to form a window-box type carton automatically and weigh, fill, check weigh and close the carton, designed for free-flowing products of delicate nature; also over-under check weigher with three weight checks—approaching net, net and over weights. *Personnel:* J. B. Wilson, A. N. Wiley, L. P. Ritschel, J. B. Mahoney, L. J. Fagg, H. P. Reinhart. *Hotel:* Cleveland.



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people
don't have
x-ray
vision...

The container must sell your product! That's why a creative approach for containers is all important. And, that's why Stone has developed new techniques . . . new printing processes . . . new pattern background papers . . . and unusual design ideas to project the full sales appeal of the product to prospective customers.

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WORLD'S LGST. STOCK OF WRAPPERS: Rebuilt and guaranteed. At great saving. All types and sizes of wrapping machines now available for immediate delivery. Package Machinery Co. FA, FA2, FA3 and FA4 Wrappers, with and without Electric Eye. Hayssen adjustable Wrappers—3"-7", 5"-11", 7"-13", 7"-17", 9"-19", 12"-24", 15"-25". With and without Electric Eye. For cellophane or wax paper. Heat seal or glue seal. Hudson Sharp Campbell Models 2W6, 2W8 and 2W10 Cellophane Wrappers. Oliver Model 799-J Wrapper. Stokes and Smith Model B Transwrap with Auger Feed and Fin Seal. Jones Automatic Carton Forming and Filling Machine. Standard Knapp 429 Automatic Carton Sealer. Amso and Doughboy Rotary Bag Sealing Machines. Pony Model M, ML and MX Labelites. Tell us your requirements. Write, wire, phone collect today. Union Standard Equipment Company, 318-322 Lafayette Street, New York 12, N. Y.

FOR SALE: Plastic Vial Mfg. Equipment. Complete equipment for assembly of one inch diameter plastic vials, from 1½ to 6 inches in length, consisting of: One special machine to taper one end of vials slightly for snug fitting of caps. (does 16 at a time). Cost \$2500.00 to build—sale price \$500.00. Two Markem model 20-A rotary print machines with extended shaft, for high speed rubber plate printing vials or any round objects of any diameter, 1 to 6 inches long. In perfect condition. Cost new \$1,150.00 each. Sale price \$500.00 each. One—32 cavity injection moulding die to mould tops and bottoms for one inch diameter vials (16 each per shot). Die fits all standard moulding presses. Cost to build new \$5,500.00. Sale price \$1,000.00. Above items may be purchased separately, if desired. All items offered subject to prior sale, f.o.b. Chicago. Samples and further information furnished upon request. Weinman Brothers, Inc., 3260 W. Grand Ave., Chicago 51, Illinois.

SLITTER-REWINDER: 52" wide, which has been handling cellophane and similar materials. Cameron, Model 24-7, Machine #133000, complete, purchased new 1943, excellent condition. Cotswold Fibres, Inc., Columbus, Ga.

FOR SALE: One Potdevin cellophane bag machine, model 110L, flat and square bags from rolls of cellophane, duplex and single. Size of bag 2¼ x 6½ to 9½ x 13. This machine will produce a bag with a lio. Immediate delivery. One General Electric magic eye, ten formers included. Motor and drive included. Completely overhauled. Price \$13,000.00. Box 480, Modern Packaging.

FOR SALE: Hayssen Wrapping Machine, Serial #11537 Model 7-17, 220 V. 3 Phase. Perfect Working Cond. Mr. Irving, Bernard Edward Company, 5252 S. Kolmar Avenue, Chicago, Illinois.

Machinery and Equipment Wanted

WANTED: 50" Beck Slitter in good condition. Box 483, Modern Packaging.

WANTED: Potdevin Strip Gluer 21" with automatic feed or feed attachment only. Atlanta Envelope Company, Box 1267, Atlanta, Georgia.

Help Wanted

SALESMEN: Established converter and printer of cellophane, polyethylene and film. Territories open in metropolitan New York, metropolitan New Jersey, Boston, and Pittsburgh. Plant located in New York. All replies confidential. Box 469, Modern Packaging.

EXTRUDED PLASTICS SALESMEN WANTED

By long established manufacturer. Excellent opportunity for salesmen to sell Polyethylene and Vinyl Extrusions. Newly developed extrusions and special facilities meet all industrial needs. Some choice territories still available. In stock service, custom work, fast deliveries. Attractive remuneration arrangement. We are interested only in people who have established contacts for extrusions.

Box 470, Modern Packaging.

WANTED: Die maker in leading carton plant in New York State. Excellent opportunity but only man experienced in dies for folding cartons needed. Apply to Box 471, Modern Packaging.

MANAGER WANTED TO ORGANIZE & OPERATE VACUUM MOLDING DIV.

We are looking for a man thoroughly experienced in vacuum forming. One capable of organizing & running such a Dept. for a well established Co. in an allied field. The man we are looking for may now be running his own business or he may be a foreman who wants to better himself. We want a man who is capable of taking complete charge, who understands costs, & all details of vacuum forming operations. All replies will be held in strictest confidence. Interviews will be arranged to suit applicants convenience.

Box 474, Modern Packaging.

MECHANICAL ENGINEER: Experienced in the design of paper converting or packaging machinery. Salary open. Write giving full resume. Potdevin Machine Co., 200 North Street, Teterboro, New Jersey. Attention of Mr. Arnold J. Smith.

SALES ENGINEERS WANTED: Experience in unscrambling, filling, capping, labeling and conveying machinery for production lines. Territories open within 300-mile radius of New York. Long established and nationally recognized machinery manufacturer. Salary and bonus. Give details in strictest confidence. Box 473, Modern Packaging.

MECHANICAL DESIGN ENGINEER

New England packaging machinery manufacturer is seeking an experienced engineer to operate its research and development division. Unusual opportunity for an engineer to pioneer in new machinery development and participate in planning company expansion.

Box 477, Modern Packaging.

WANTED: Leading manufacturer of packaging equipment has opening for graduate engineer with experience in the packaging industry. Applicants must be experienced in design, development and modification of automatic machinery and must be capable of supervising production. Excellent opportunity with long established firm. Salary commensurate with capabilities. Box 472, Modern Packaging.

PACKAGING ENGINEERS

Leading manufacturer of containers for the food industry needs experienced men with mechanical or chemical background who can recommend markets and products for areas of study and research. Good personality required for customer contacts. Unlimited opportunity with fast growing company located in north Chicago suburban area. Please send personal resume. Replies will be held in strictest confidence.

Box 485, Modern Packaging.

WESTERN REPRESENTATIVE WANTED: By a Midwest nationally advertised manufacturer of Flexographic Printing presses. Possibilities unlimited—depending upon individual. Our equipment is in full operation throughout the United States, Canada, and many foreign countries. Send resume and availability for interview in your area. Box 475, Modern Packaging.

WANTED

Package machinery engineer and designer familiar with wrapping machinery and having production experience. Salary commensurate with ability and background. Opportunity for fast advancement to executive post with aggressive machinery manufacturer. Our staff knows of this opening. All replies held in complete confidence.

Box 486, Modern Packaging.

WANTED: For polyethylene extrusion of lay-flat tubing and flat film. Chemical or mechanical engineer for complete supervision of large plant. Must have thorough experience and be able to assume complete responsibility. Assured future for the right man. Located New York City. Salary open. Write fully. Box 484, Modern Packaging.

Situations Wanted

SALESMAN: College grad, 33, with 5 years experience selling in metropolitan N.Y.C. Have had complete and diversified experience in selling printed and plain cello, poly and glassine in bags and rolls. Seeks connection with Major Company Only for opportunity to utilize capability and ingenuity to their greatest advantage. Box 476, Modern Packaging.

YOUNG ENERGETIC EXECUTIVE: Desires opportunity with progressive company. College graduate whose past experience includes establishment of two ink manufacturing companies. Presently employed as manager of one with duties of purchasing, formulating, color matching, technical representation, supervision of factory and office, etc., etc. Will prove asset to company where capabilities of high calibre ink man are desired. Box 481, Modern Packaging.

Miscellaneous

LEADING FIBER PROD. MFR: With several plants across the U.S. desires to enter the fibrous packaging material field and wishes to contact qualified sales personnel or organization to develop this market. Reply Box 478, Modern Packaging.

PATENTED POLYETHYLENE SQUEEZE BOTTLE

We think Sprayette is the finest product possible for the bathroom. This invention—8 claims allowed—is a pigmented white polyethylene squeeze bottle designed to clamp over the rim of a standard toilet bowl underneath the seat. Each time the seat is depressed, the bathroom is deodorized and the bowl is disinfected and cleaned. As a 6 oz. dispenser this product will last about two months in the average home—it is then thrown away and replaced by another. As a finished package the product will cost less than \$20 and we think it will retail for \$.89 to \$1.29. Leading retail, drug and direct selling organizations are enthusiastic about potential volume and want to handle the product. Merchandising executives estimate potential volume in millions of units. Product can be developed and market tested for \$10,000. We are interested in a company who will finance and develop this product on a royalty basis to us. Full information furnished on request.

Behrends & Ewing Enterprises
102 E. Bellevue Pl.
Chicago 11, Illinois

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Bartelt's "Panel of Experts" will be at the PMMI Show to Help You!

If your product can be contained in a pouch style, heat sealed bag, bring your packaging problems and a sample of your product to Booth 103 at the PMMI show for study. Bartelt's Panel of Experts will (1) Analyze your product and problems, (2) Present packaging ideas, (3) Prepare sample packages, (4) Give you a firm, written quotation. All of this without obligation on your part,

but with the hope that our experts can show you how a versatile, automatic Bartelt Packaging Line can save you money, and give you a sturdy, sales-winning package. A Bartelt Line will make, fill, and seal pouches, and insert one, two, or three pouches into a carton. You will find that your packaging problems will get sincere study by experts in Booth 103.

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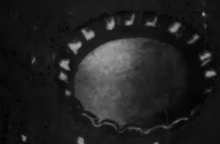
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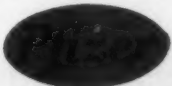
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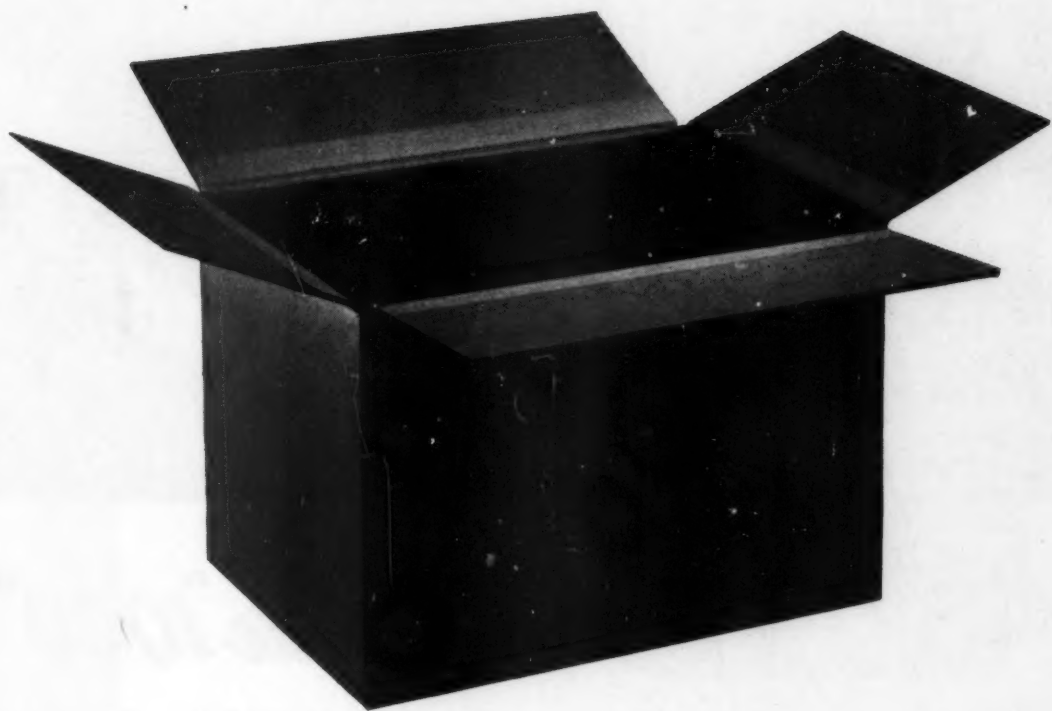
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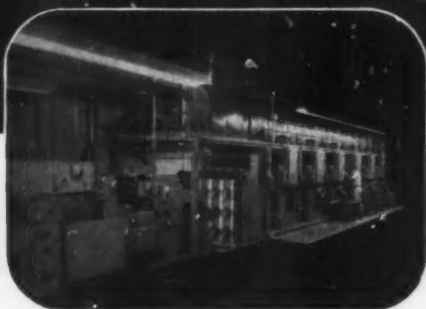
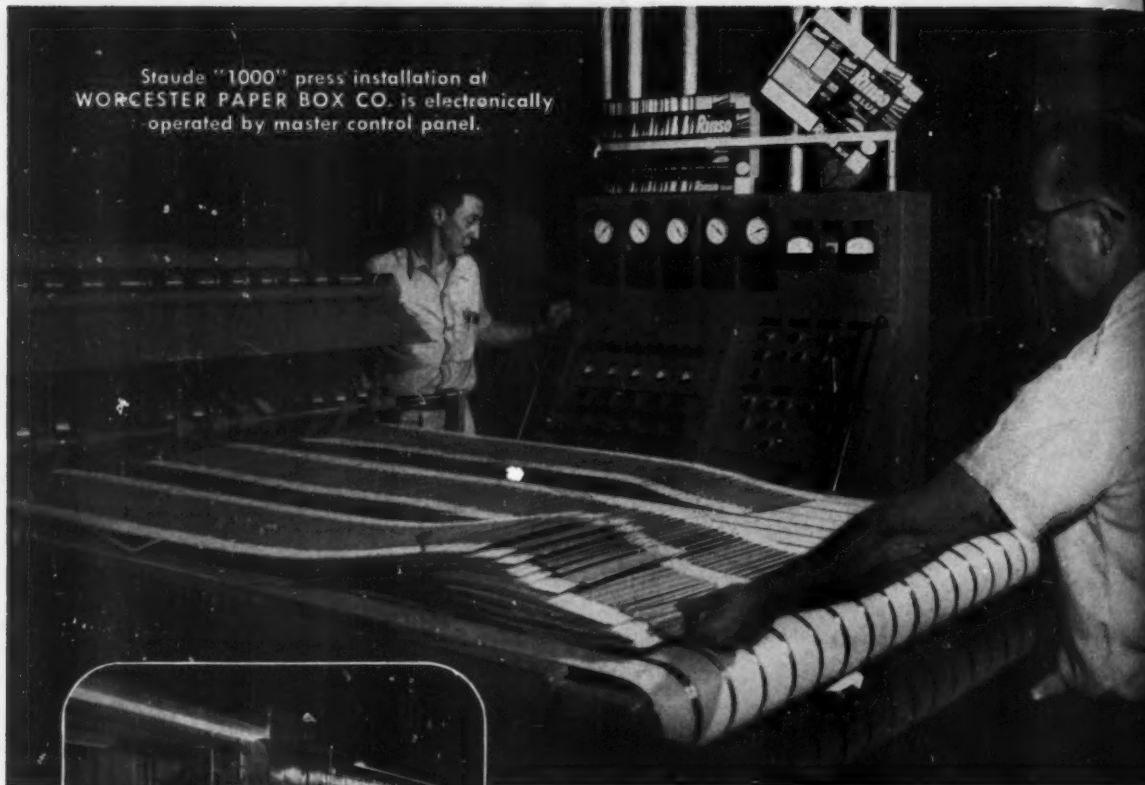
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
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